# Acer Aspire 4333/4733Z
# Service Guide

Service guide files and updates are available on the ACER/CSD web; for more information, please refer to http://csd.acer.com.tw

PRINTED IN TAIWAN

Downloaded from www.Manualslib.com manuals search engine

# Revision History

Please refer to the table below for the updates made on this service guides.

| Date | Chapter | Updates |
|---|---|---|
| | | |
| | | |
| | | |



Downloaded from www.Manualslib.com manuals search engine

# Copyright

Copyright © 2010 by Acer Incorporated. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Acer Incorporated.

# Disclaimer

The information in this guide is subject to change without notice.

Acer Incorporated makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any Acer Incorporated software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not Acer Incorporated, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software.

Acer is a registered trademark of Acer Corporation.
Intel is a registered trademark of Intel Corporation.
Other brand and product names are trademarks and/or registered trademarks of their respective holders.



Downloaded from www.Manualslib.com manuals search engine

## Conventions

The following conventions are used in this manual:

| | |
|---|---|
| **SCREEN MESSAGES** | Denotes actual messages that appear on screen. |
| **NOTE** | Gives bits and pieces of additional information related to the current topic. |
| **WARNING** | Alerts you to any damage that might result from doing or not doing specific actions. |
| **CAUTION** | Gives precautionary measures to avoid possible hardware or software problems. |
| **IMPORTANT** | Reminds you to do specific actions relevant to the accomplishment of procedures. |

**NOTE: This symbol where placed in the Service Guide designates a component that should be recycled according to the local regulations.**



Downloaded from www.Manualslib.com manuals search engine

# Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.



Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

# Table of Contents


**System Specifications 1**

Features . . . . . 1
System Block Diagram . . . . . 6
Your Acer Notebook tour . . . . . 7
Top View . . . . . 7
Closed Front View . . . . . 8
Rear view . . . . . 8
Left View . . . . . 9
Right View . . . . . 9
Base View . . . . . 10
Indicators . . . . . 11
Touchpad Basics . . . . . 12
Using the Keyboard . . . . . 13
Lock Keys and embedded numeric keypad . . . . . 13
Windows Keys . . . . . 14
Hot Keys . . . . . 15
Hardware Specifications and Configurations . . . . . 16

**System Utilities 31**

BIOS Setup Utility . . . . . 31
Navigating the BIOS Utility . . . . . 31
Information . . . . . 32
Main . . . . . 33
Security . . . . . 34
Boot . . . . . 37
Exit . . . . . 38
BIOS Flash Utility . . . . . 39
DOS Flash Utility . . . . . 39
WinFlash Utility . . . . . 39
Remove HDD/BIOS Password Utilities . . . . . 40
Removing BIOS Passwords: . . . . . 41
Cleaning BIOS Passwords . . . . . 42
Miscellaneous Utilities . . . . . 43

**Machine Disassembly and Replacement 45**

Disassembly Requirements . . . . . 45
Pre-disassembly Instructions . . . . . 46
Disassembly Process . . . . . 47
External Modules Disassembly Process . . . . . 48
External Modules Disassembly Flowchart . . . . . 48
Removing the Battery Pack . . . . . 49
Removing the SD Dummy Card . . . . . 50
Removing the Keyboard . . . . . 51
Removing the ODD Module . . . . . 53
Main Unit Disassembly Process . . . . . 55
Main Unit Disassembly Flowchart . . . . . 55
Removing the Lower Cover . . . . . 56
Component Overview . . . . . 57
Removing the DIMM Modules . . . . . 58
Removing the WLAN Module . . . . . 59
Removing the USB Board . . . . . 60
Removing the RTC Battery . . . . . 62
Removing the Bluetooth Module . . . . . 63
Removing the HDD Module . . . . . 64




Downloaded from www.Manualslib.com manuals search engine

# Table of Contents


Removing the LCD Module . . . . . .66
Removing the Thermal Module . . . . . .68
Removing the CPU . . . . . .69
Removing the Mainboard . . . . . .71
LCD Module Disassembly Process . . . . . .74
LCD Module Disassembly Flowchart . . . . . .74
Removing the LCD Bezel . . . . . .75
Removing the Camera Module . . . . . .77
Removing the LCD Panel . . . . . .78
Remove the LCD Hinges . . . . . .79
Removing the LVDS Cable . . . . . .80
Removing the WLAN Antennas . . . . . .81
LCD Module Assembly Process . . . . . .82
Replacing the WLAN Antennas . . . . . .82
Replacing the LVDS Cable . . . . . .83
Replacing the LCD Hinges . . . . . .84
Removing the LCD Panel . . . . . .85
Replacing the Camera Module . . . . . .87
Replacing the LCD Bezel . . . . . .88
Main Unit Assembly Process . . . . . .91
Replacing the Mainboard . . . . . .91
Replacing the CPU . . . . . .93
Replacing the Thermal Module . . . . . .94
Replacing the LCD Module . . . . . .96
Replacing the Bluetooth Module . . . . . .98
Replacing the HDD Module . . . . . .99
Removing the RTC Battery . . . . . .101
Replacing the USB Board . . . . . .102
Replacing the WLAN Module . . . . . .103
Replacing the DIMM Modules . . . . . .105
Replacing the Lower Cover . . . . . .106
External Module Assembly Process . . . . . .107
Replacing the ODD Module . . . . . .107
Replacing the Keyboard . . . . . .108
Replacing the SD dummy card . . . . . .110
Replacing the Battery Pack . . . . . .110

**Troubleshooting 111**

Common Problems . . . . . .111
Power On Issue . . . . . .112
No Display Issue . . . . . .113
Random Loss of BIOS Settings . . . . . .114
LCD Failure . . . . . .115
Built-In Keyboard Failure . . . . . .115
Touchpad Failure . . . . . .116
Internal Speaker Failure . . . . . .116
HDD Not Operating Correctly . . . . . .118
ODD Failure . . . . . .119
Wireless Function Failure . . . . . .122
Thermal Unit Failure . . . . . .122
External Mouse Failure . . . . . .123
Other Failures . . . . . .123
Intermittent Problems . . . . . .124
Undetermined Problems . . . . . .124
Post Codes . . . . . .125




Downloaded from www.Manualslib.com manuals search engine

**Jumper and Connector Locations** 131

Top View . . . . . 131
Bottom View . . . . . 132
Clearing Password Check and BIOS Recovery . . . . . 133
BIOS Recovery by Crisis Disk . . . . . 134

**FRU (Field Replaceable Unit) List** 135

Acer Aspire 4333 Exploded Diagrams . . . . . 136
LCD Assembly . . . . . 136
Chassis Assembly . . . . . 137
Acer Aspire 4333 FRU List . . . . . 138
Screw List . . . . . 144

**Model Definition and Configuration** 146

Aspire 4333 . . . . . 146
Aspire 4333Z . . . . . 149

**Test Compatible Components** 151

**Online Support Information** 155

**Index** 157



Downloaded from www.Manualslib.com manuals search engine

# Table of Contents



Downloaded from www.Manualslib.com manuals search engine

Chapter 1

# System Specifications

## Features

Below is a brief summary of the computer's many features:

**NOTE:** Items denoted with an (*) are only available for selected models.

### Operating system

- Genuine Windows® 7 Home Premium 64-bit
- Genuine Windows® 7 Home Basic 64-bit

### System memory

- Dual-channel DDR3 SDRAM support:
  - Up to 4 GB of DDR3 system memory, upgradable to 8 GB using two soDIMM modules

### CPU and chipset

- Aspire 4333
  - Intel® Celeron® processor T3500 (1 MB L2 cache, 2.10 GHz, 800 MHz FSB, 35 W) supporting Intel® 64 architecture
  - Intel® Celeron® processor 900 (1 MB L2 cache, 2.20 GHz, 800 MHz FSB, 35 W) supporting Intel® 64 architecture
  - Mobile Intel® GL40 Express Chipset
- Aspire 4733Z
  - Intel® Pentium® processor PMDT4500 (1 MB L2 cache, 2.30 GHz, 800 MHz FSB, 35 W) supporting Intel® 64 architecture
  - Mobile Intel® GL40 Express Chipset

### Graphics

- Mobile Intel® GL40 Express Chipset with integrated 3D graphics, featuring Intel® Graphics Media Accelerator 4500M (Intel® GMA 4500M) with up to 1759 MB of Intel® Dynamic Video Memory Technology 5.0 (64 MB of dedicated system memory, up to 1695 MB of shared system memory), supporting Microsoft® DirectX® 10
- Dual independent display support
- 16.7 million colors
- External resolution / refresh rates:
  - VGA port up to 2048 x 1536: 60 Hz
  - HDMI™ port up to 1728 x 1080: 60 Hz
- MPEG-2/DVD decoding
- WMV9 (VC-1) and H.264 (AVC) decoding
- HDMI™ (High-Definition Multimedia Interface) with HDCP (High-bandwidth Digital Content Protection) support



Downloaded from www.Manualslib.com manuals search engine

## Display

- 14" HD 1366 x 768 pixel resolution, high-brightness (200-nit) Acer CineCrystal™ LED-backlit TFT LCD
- Mercury free, environment friendly
- 16:9 aspect ratio

## Audio

- Built-in speaker
- High-definition audio support
- Built-in microphone
- MS-Sound compatible

## Storage

- Hard disk drive
  - 160/250/320/500/640/750 GB or larger
- Multi-in-1 card reader, supporting:
  - Secure Digital™ (SD) Card and MultiMediaCard™ (MMC)

## Webcam

- Acer Video Conference, featuring:
  - Acer Crystal Eye 1.3 MP webcam, 1280 x 1024 resolution

## Wireless and networking

- WLAN:
  - Acer InviLink™ Nplify™ 802.11b/g/n Wi-Fi CERTIFIED™
  - Acer InviLink™ 802.11b/g Wi-Fi CERTIFIED™802.11b/g/n Wi-Fi CERTIFIED™
  - Supporting Acer SignalUp™ wireless technology
- WPAN:
  - Bluetooth® 3.0+HS
  - Bluetooth® 2.1+EDR
- LAN: Gigabit Ethernet, Wake-on-LAN ready

## Privacy control

- BIOS user, supervisor, HDD passwords
- Kensington lock slot

## Dimensions and weight

- Dimensions
  - 341 (W) x 264.5 (D) x 26.7/33.5 (H) mm (13.43 x 10.41 x 1.05/1.32 inches)
- Weight
  - 2.5 kg (5.51 lbs.) with 6-cell battery pack



Downloaded from www.Manualslib.com manuals search engine

## Power adapter and battery

- ACPI 3.0 CPU power management standard: supports Standby and Hibernation power-saving modes

**Power adapter**

- 3-pin 65 W AC adapter:·
  - 108 (W) x 46 (D) x 29.5 (H) mm (4.25 x 1.81 x 1.16 inches)·
  - 225 g (0.49 lbs.) with 180 cm DC cable

**Battery**

- 48 W 4400 mAh 6-cell Li-ion standard battery pack
- Battery life: 3 hours
- ENERGY STAR®

## Input and control

- Keyboard
  - 86-/87-/91-key Acer FineTip keyboard with international language support
- Touchpad
  - Multi-gesture Touchpad, supporting two-finger scroll, pinch, rotate, flip
- Media keys
  - Media control keys (printed on keyboard): play/pause, stop, previous, next, volume up, volume down

## I/O interface

- 2-in-1 card reader (SD™, MMC)
- Three USB 2.0 ports
- HDMI™ port with HDCP support
- External display (VGA) port
- Headphone/speaker/line-out jack
- Microphone-in jack
- Ethernet (RJ-45) port
- DC-in jack for AC adapter



Downloaded from www.Manualslib.com manuals search engine

## Software

- Productivity
  - Acer Backup Manager
  - Acer ePower Management
  - Acer eRecovery Management
  - Adobe® Flash® Player 10.1
  - Adobe® Reader® 9.1
  - eSobi™
  - Microsoft® Office 2010 preloaded (purchase a product key to activate)
  - Microsoft® Office Starter 2010
  - Norton™ Online Backup
- Security
  - McAfee® Internet Security Suite Trial
  - MyWinLocker®
- Multimedia
  - Cyberlink® PowerDVD™
  - NTI Media Maker™
- Gaming
  - Oberon GameZone
  - WildTangent®
- Communication and ISP
  - Acer Crystal Eye
  - Microsoft® Silverlight™
  - Skype™
  - Windows Live™ Essentials — Wave 3.2 (Mail, Photo Gallery, Live™ Messenger, Movie Maker, Writer)
- Web links and utilities
  - Acer Accessory Store
  - Acer Identity Card
  - Acer Registration
  - Acer Updater
  - eBay® shortcut 2009
  - Netflix shortcut

## Optional Items

- 1/2/4 GB DDR3 soDIMM module
- 6-cell Li-ion battery pack
- 3-pin 90 W AC adapter



Downloaded from www.Manualslib.com manuals search engine

## Warranty

- One-year International Travellers Warranty (ITW)

## Environment

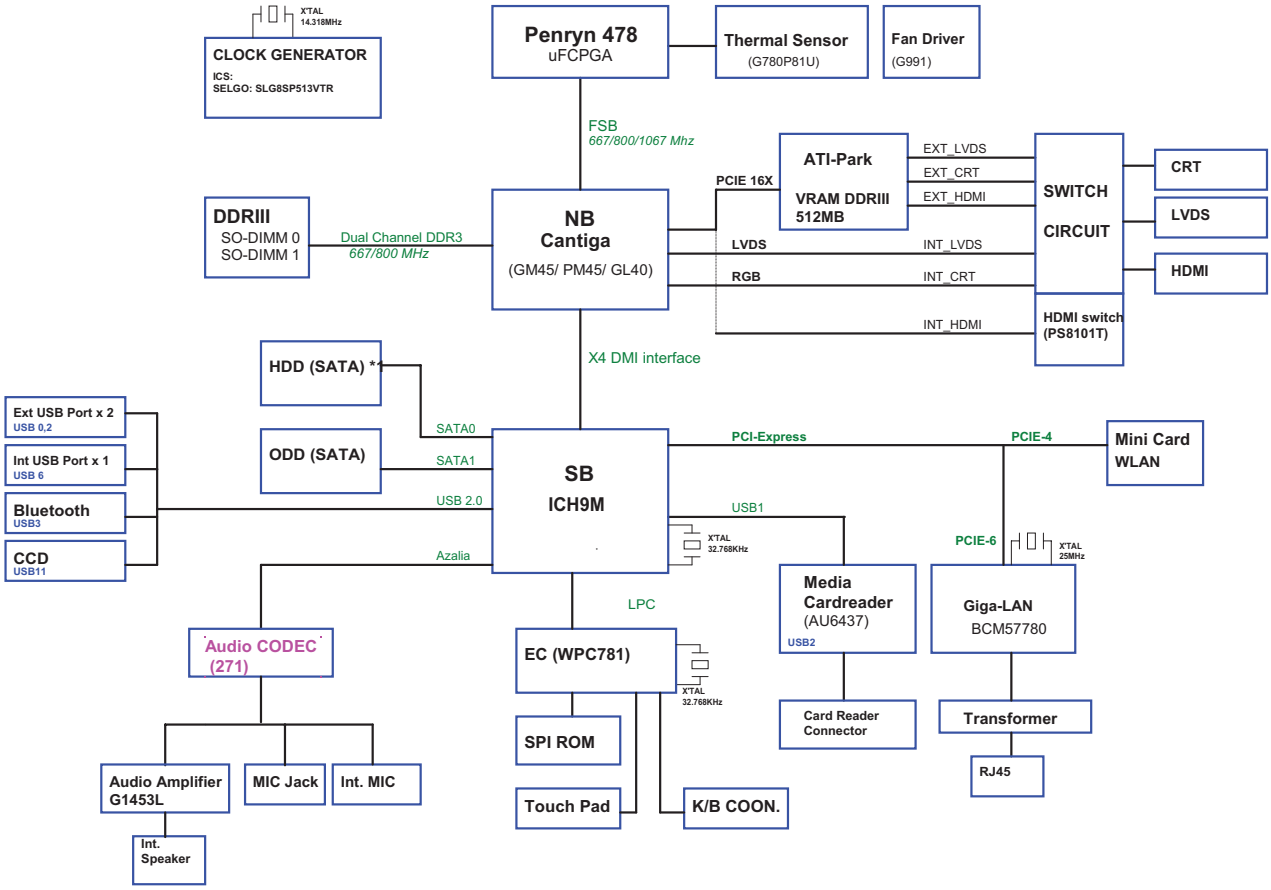
- Temperature:
  - Operating: 41 °F to 95 °F (5 °C to 35 °C)
  - Non-operating: -4 °F to -149 °F (20 °C to 65 °C)
- Humidity (non-condensing):
  - Operating: 20% to 80%
- Non-operating: 20% to 80%

**NOTE:** The specifications listed above are for reference only. The exact configuration of the PC depends on the model purchased.



Downloaded from www.Manualslib.com manuals search engine

# System Block Diagram






Downloaded from www.Manualslib.com manuals search engine

# Your Acer Notebook tour

## Top View

| # | Icon | Item | Description |
|---|---|---|---|
| **1** | | Acer Crystal Eye webcam | Web camera for video communication. (only for certain models) |
| **2** | | Display screen | Also called Liquid-Crystal Display (LCD), displays computer output (configuration may vary by model). |
| **3** | | Power button | Turns the computer on and off. |
| **4** | | Keyboard | For entering data into your computer |
| **5** | | Touchpad | Touch-sensitive pointing device which functions like a computer mouse. |
| **6** | | Click buttons (left, and right) | The left and right buttons function like the left and right mouse buttons. |
| **7** | | Microphone | Internal microphone for sound recording. |



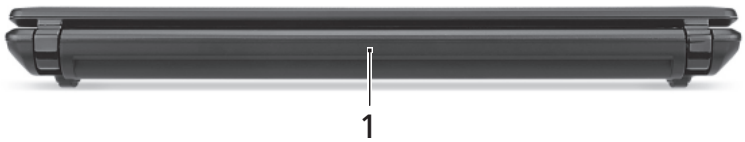
Downloaded from www.Manualslib.com manuals search engine

| # | Icon | Item | Description |
|---|---|---|---|
| **8** | | Power indicator | Indicates the computer's power status. |
| | | Battery indicator | Indicates the computer's battery status.<br>1. Charging: The light shows amber when the battery is charging.<br>2. Fully charged: The light shows blue when in AC mode. |
| | | HDD indicator | Indicates when the hard disk drive is active. |
| | | Communication indicator | Indicates the computer's wireless connectivity device status. |
| **9** | | Palmrest | Comfortable support area for your hands when you use the computer. |
| **10** | | Speaker | Delivers audio output. |

## Closed Front View

| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Microphone jack | Accepts inputs from external microphones. |
| | | Headphone/ speaker/line-out jack | Connects to audio line-out devices (e.g., speakers, headphones). |
| 2 | | 2-in-1 card reader | Accepts Secure Digital (SD), MultiMediaCard (MMC).<br>Note: Push to remove/install the card. Only one card can operate at any given time. |

## Rear view

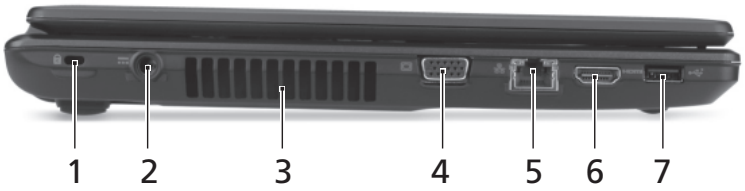


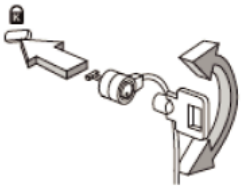

| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Battery bay | Houses the computer's battery pack. |



Downloaded from www.Manualslib.com manuals search engine

# Left View




| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Kensington lock slot  | Connects to a Kensington-compatible computer security lock.<br>Note: Wrap the computer security lock cable around an immovable object such as a table or handle of a locked drawer. Insert the lock into the notch and turn the key to secure the lock. Some keyless models are also available. |
| 2 | | DC-in jack | Connects to an AC adapter. |
| 3 | | Ventilation slots | Enable the computer to stay cool, even after prolonged use. |
| 4 | | External display (VGA) port | Connects to a display device (e.g., external monitor, LCD projector). |
| 5 | | Ethernet (RJ-45) port | Connects to an Ethernet 10/100/1000-based network. |
| 6 | HDMI | HDMI port | Supports high-definition digital video connections. |
| 7 | | USB 2.0 port | Connects to USB 2.0 devices (e.g., USB mouse, USB camera). |

# Right View

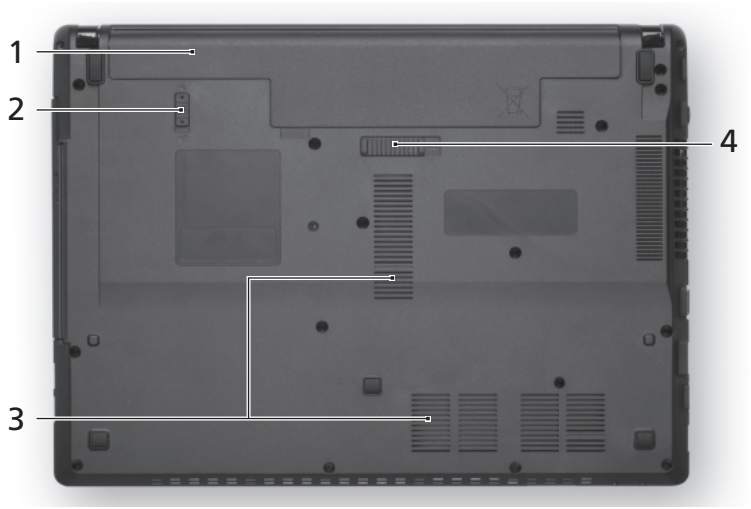
| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | USB 2.0 ports | Connect to USB 2.0 devices (e.g., USB mouse, USB camera). |
| 2 | | Optical drive | Internal optical drive; accepts CDs or DVDs. |
| 3 | | Optical disk access indicator | Lights up when the optical drive is active. |
| 4 | | Optical drive eject button | Ejects the optical disk from the drive. |



Downloaded from www.Manualslib.com manuals search engine

| No. | Icon | Item | Description |
|---|---|---|---|
| 5 | | Emergency eject hole | Ejects the optical drive tray when the computer is turned off.<br>Note: Insert a paper clip to the emergency eject hole to eject the optical drive tray when the computer is off. |

## Base View




| No. | Icon | Item | Description |
|---|---|---|---|
| 1 | | Battery bay | Houses the computer's battery pack. |
| 2 | | Battery lock | Locks the battery in position. |
| 3 | | Ventilation slots | Enable the computer to stay cool, even after prolonged use. |
| 4 | | Battery release latch | Releases the battery for removal. |



Downloaded from www.Manualslib.com manuals search engine

# Indicators

The computer has several easy-to-read status indicators.

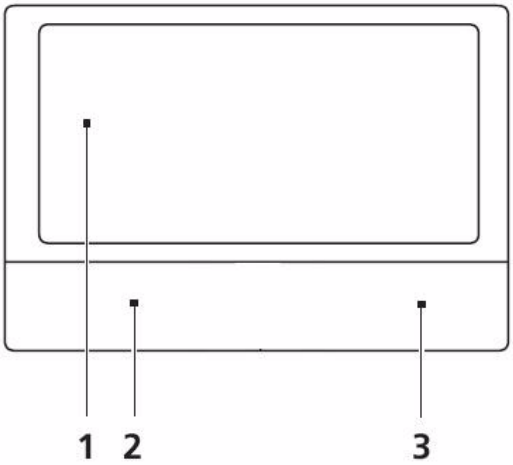
| Icon | Function | Description |
|---|---|---|
| | Power | Indicates the computer's power status. |
| | Battery | Indicates the computer's battery status.<br>**NOTE:** 1. **Charging:** The light shows amber when the battery is charging. 2. **Fully charged:** The light shows green when in AC mode. |
| | HDD | Indicates when the hard disk drive is active. |
| | Communication indicator | Indicates the computer’s wireless connectivity device status. |



Downloaded from www.Manualslib.com manuals search engine

# Touchpad Basics

The following items show you how to use the Touchpad:




- Move your finger across the Touchpad (1) to move the cursor.
- Press the left (2) and right (3) buttons located beneath the Touchpad to perform selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the Touchpad is the same as clicking the left button.

| Function | Left Button (2) | Right Button (3) | Main Touchpad (1) |
|---|---|---|---|
| Execute | Quickly click twice. | | Tap twice (at the same speed as double-clicking a mouse button). |
| Select | Click once. | | Tap once. |
| Drag | Click and hold, then use finger on the Touchpad to drag the cursor. | | Tap twice (at the same speed as double-clicking a mouse button); rest your finger on the Touchpad on the second tap and drag the cursor. |
| Access context menu | | Click once. | |

**NOTE:** When using the Touchpad, keep it - and your fingers - dry and clean. The Touchpad is sensitive to finger movement; hence, the lighter the touch, the better the response. Tapping too hard will not increase the Touchpad's responsiveness.



Downloaded from www.Manualslib.com manuals search engine

# Using the Keyboard

The keyboard has full-sized keys and an embedded numeric keypad, separate cursor, lock, Windows, function and special keys.

## Lock Keys and embedded numeric keypad

The keyboard has two lock keys which you can toggle on and off.

| Lock key | Description |
|---|---|
| Caps Lock | When Caps Lock is on, all alphabetic characters typed are in uppercase. |
| Num Lock<br><Fn> + <F11> | When Num Lock is on, the embedded keypad is in numeric mode. |
| Scroll Lock<br><Fn> + <F12> | When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications. |



Downloaded from www.Manualslib.com manuals search engine

# Windows Keys

The keyboard has two keys that perform Windows-specific functions.

| Key | Description |
|---|---|
| Windows key | Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions:<br>**<⊞>:** Open or close the Start menu<br>**<⊞> + <D>:** Display the desktop<br>**<⊞> + <E>:** Open Windows Explore<br>**<⊞> + <F>:** Search for a file or folder<br>**<⊞> + <G>:** Cycle through Sidebar gadgets<br>**<⊞> + <L>:** Lock your computer (if you are connected to a network domain), or switch users (if you're not connected to a network domain)<br>**<⊞> + <M>:** Minimizes all windows<br>**<⊞> + <R>:** Open the Run dialog box<br>**<⊞> + <T>:** Cycle through programs on the taskbar<br>**<⊞> + <U>:** Open Ease of Access Center<br>**<⊞> + <X>:** Open Windows Mobility Center<br>**<⊞> + <BREAK>:** Display the System Properties dialog box<br>**<⊞> + <SHIFT+M>:** Restore minimized windows to the desktop<br>**<⊞> + <TAB>:** Cycle through programs on the taskbar<br>**<⊞> + <SPACEBAR>:** Bring all gadgets to the front and select Windows Sidebar<br>**<CTRL> + <⊞> + <F>:** Search for computers (if you are on a network)<br>**<CTRL> + <⊞> + <TAB>:** Use the arrow keys to cycle through programs on the taskbar<br>**Note:** Depending on your edition of Windows, some shortcuts may not function as described. |



Downloaded from www.Manualslib.com manuals search engine

# Hot Keys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness, volume output and the BIOS utility.

To activate hot keys, press and hold the <**Fn>** key before pressing the other key in the hotkey combination.

| Hotkey | Icon | Function | Description |
|---|---|---|---|
| <Fn> + <F3> | | Communication key | Enables / disables the computer's communication devices. (Communication devices may vary by configuration.) |
| <Fn> + <F4> | | Sleep | Puts the computer in Sleep mode. |
| <Fn> + <F5> | | Display toggle | Switches display output between the display screen, external monitor (if connected) and both. |
| <Fn> + <F6> | | Display Off | Turns the display screen backlight off to save power. Press any key to return. |
| <Fn> + <F7> | | Touchpad toggle | Turns the internal Touchpad on and off. |
| <Fn> + <F8> | | Speaker toggle | Turns the speakers on and off. |
| <Fn> + <▷> | | Brightness up | Increases the screen brightness. |
| <Fn> + <◁> | | Brightness down | Decreases the screen brightness. |
| <Fn> + <△> | | Volume up | Increases the sound volume. |
| <Fn> + <▽> | | Volume down | Decreases the sound volume. |
| <Fn> + <Home> | | Play/Pause | Play or pause a selected media file. |
| <Fn> +<Pg Up> | | Stop | Stop playing the selected media file. |
| <Fn> +<Pg Dn> | | Previous | Return to the previous media file. |
| <Fn> + <End> | | Next | Jump to the next media file. |



Downloaded from www.Manualslib.com manuals search engine

# Hardware Specifications and Configurations

**Processor**

| Item | Specification |
|---|---|
| CPU | Intel Penryn Processor |
| Type | 35W CPU |
| CPU Package | Micro-Flip-Chip Pin Grid Array (FC-mPGA), 479 BGA socket. |
| Power | IMVP-6 |
| On-die Cache | 4-MB/6-MB second level cache |
| Front Side Bus | 667/800/1066 MHz |

**Processor Specifications (Aspire 4333)**

| Item | CPU Speed | Cores | Bus Speed (MHz) | Mfg. Tech | Cache Size | Core Voltage | P/N |
|---|---|---|---|---|---|---|---|
| CMT3500 | 2.1 G | 2 | 800 | Micro-FCPGA | 1 M | 35W | KC.35001.CMT |
| CM900 | 2.2 G | 2 | 800 | Micro-FCPGA | 1 M | 35W | KC.N0001.900 |

**Processor Specifications (Aspire 4733Z)**

| Item | CPU Speed | Cores | Bus Speed (MHz) | Mfg. Tech | Cache Size | Core Voltage | P/N |
|---|---|---|---|---|---|---|---|
| PMDT4500 | 2.3 G | 2 | 800 | Micro-FCPGA | 1 M | 35W | KC.45001.DTP |

**Northbridge**

| Item | Specification |
|---|---|
| Chipset | Cantiga (GL40) |
| Package | 1299 pins Micro-FCBGA (35 x 35 mm) |
| Features | • Penryn processor support<br>• Supports Dual Channel DDR3 SDRAM, Memory Size 128MB ~ 8GB.<br>• Integrated VGA<br>• Direct Media I/F (DMI), between GMCH and ICH9-M Chipset connection. |

**Southbridge**

| Item | Specification |
|---|---|
| Chipset | ICH9-M |
| Package | 652 pins BGA (31 x 31 mm) |
| Features | • Six PCI Express root ports supported<br>• Support Serial ATA I/F<br>• LAN controller via LAN connect interface (LCI) |



Downloaded from www.Manualslib.com manuals search engine

**CPU Fan True Value Table (TJ105)**

| Fan On (Celsius) | Fan Off (Celsius) | RPM |
|---|---|---|
| 35 | 30 | 2500 |
| 45 | 40 | 2900 |
| 55 | 50 | 3200 |
| 65 | 60 | 3500 |
| 75 | 70 | 3800 |

Throttling 50%: On= 100°C; OFF=90°C

OS shut down at 105°C; H/W shut down at 105°C

**CPU Fan True Value Table (TJ90)**

| Fan On (Celsius) | Fan Off (Celsius) | RPM |
|---|---|---|
| 35 | 30 | 2500 |
| 45 | 40 | 2900 |
| 55 | 50 | 3200 |
| 65 | 60 | 3500 |
| 75 | 70 | 3800 |

Throttling 50%: On= 85°C; OFF=80°C

OS shut down at 90°C; H/W shut down at 90°C

**System Memory**

| Item | Specification |
|---|---|
| Memory controller | NB Cantiga- GM |
| Memory size | 0MB (no on-board memory) |
| DIMM socket number | 2 sockets |
| Supports memory size per socket | 2 GB |
| Supports maximum memory size | 4 GB |
| Supports DIMM type | JEDEC 204-pin DDR3-800/1066 SODIMM for PC3-10600/ PC3-8500/ PC3-6400 |
| Supports DIMM speed | 1.87ns @ CL = 7 (DDR3-1066)<br>1.87ns @ CL = 8 (DDR3-1066)<br>2.5ns @ CL = 5 (DDR3-800)<br>2.5ns @ CL = 6 (DDR3-800) |
| Supports DIMM voltage | 1.5V +/- 0.075V |
| Supports DIMM package | 204-pin SODIMM, 67.75”x 30.15”x 3.8”(Max) |
| Memory module combinations | You can install memory modules in any combinations as long as they match the above specifications. |

**System Board Major Chips**

| Item | Specification |
|---|---|
| Core logic | Northbridge: Cantiga (GL40)<br>Southbridge: ICH9M |
| VGA | ATI-Park |
| LAN | BCM57780 |
| USB 2.0 | ICH9-M |
| Super I/O controller | ICH9-M |
| Bluetooth | ICH9-M |
| Wireless | ICH9-M |



Downloaded from www.Manualslib.com manuals search engine

| Item | Specification |
|---|---|
| PCMCIA | N/A |
| Audio codec | ALC271 |
| Card reader | AU6437 |

**BIOS**

| Item | Specification |
|---|---|
| BIOS vendor | Phoenix |
| BIOS Version | 1.00 |
| BIOS ROM type | SST 25VF160B, 8Mbit CMOS Boot Block Flash Memory |
| Features | • Flash ROM 2MB<br>• Suspend to RAM (S3)/Disk(S4)<br>• Various hot-keys for system control<br>• Support SMBIOS 2.3, PCI2.2<br>• Refer to Acer BIOS specification<br>• DMI utility for BIOS serial number configurable/asset tag<br>• Support PXE<br>• Support Y2K solution<br>• Support WinFlash<br>• Wake on LAN form S3<br>• Wake on LAN from S4 in AC mode<br>• System information |

**Memory Combinations**

| Slot 1 | Slot 2 | Total Memory |
|---|---|---|
| 0MB | 1024MB | 1024MB |
| 0MB | 2048MB | 2048MB |
| 0MB | 4096MB | 4096MB |
| 1024MB | 0MB | 1024MB |
| 1024MB | 512MB | 1536MB |
| 1024MB | 1024MB | 2048MB |
| 1024MB | 2048MB | 3072MB |
| 2048MB | 0MB | 2048MB |
| 2048MB | 512MB | 2560MB |
| 2048MB | 1024MB | 3072MB |
| 2048MB | 2048MB | 4096MB |

**Wireless Module 802.11b/g/Draft-N**

| Item | Specification | | | |
|---|---|---|---|---|
| Manufacturer | Foxconn | | | Liteon |
| Model | 43225 | HB95 | HB97 | HB97 |
| Supported Standards | IEEE 802.11b/g/n | IEEE 802.11b/g | IEEE 802.11b/11g | IEEE 802.11b/g/n |



Downloaded from www.Manualslib.com manuals search engine

**LAN Interface**

| Item | Specification |
|---|---|
| Part Name | BCM57780 |
| Package | 64pin QFN |
| Features | Supports 10/100/1000 Mb/s |
| Interface | PCI-Express |

**Bluetooth Interface**

| Item | Specification |
|---|---|
| Chipset | • Foxconn Bluetooth BCM2046<br>• Foxconn Bluetooth BCM2070<br>• Foxconn Bluetooth AR3011 |
| Radio Technology | FHSS |
| Operating Frequency | 2402 ~ 2480MHz ISM band |
| Channel Numbers | 79 channels with 1MHz BW |
| Transmitter Output Power | -6~4dBm output power for class2 operation |
| Receiver Sensitivity | -75dBm @ 0.1% BER (Max) |
| Maximum Receiver Signal | -10dBm |
| Operating Voltage | 3.3V+/-0.3V |
| Interface | USB 2.0 |
| Protocol | BCM2046: BT2.1+EDR<br>BCM2070: BT2.1+EDR; supports BT3.0+HS after driver upgrade<br>AR3011: BT2.1+EDR; supports BT3.0+HS after driver upgrade |
| Connector type | BCM2046: 8 pin USB2.0 with JST SM08B-SURS-TF<br>BCM2070: 6 pin JST SM06B-XSRK-ETB (HF)<br>AR3011: SM08B-SURS-TF(LF)(SN) JST |

**3G Module (Not available with this model)**

| Item | Specification |
|---|---|
| Manufacturer | |
| Model | |
| Card Type | |
| Throughput | |
| Supported Services | |

**Speaker**

| Item | Specification |
|---|---|
| Vendor | Vansonic Enterprise Co., Ltd. |
| Module No. | PB2814KN04-9LB |
| Power Rating | Normal 1 W, Maximum 1.5 W |
| Output Sound Pressure Level | 82 ± 3 db |
| Response FO | 700 -/+ 20% Hz |
| Distortion | 5% MAX |



Downloaded from www.Manualslib.com manuals search engine

### Hard Disk Drive Interface

| Item | Specification | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Capacity (GB) | 160 | | | | 250 | | | |
| Vendor & Model Name | Seagate ST9160314AS<br>HGST HTS545016B9A300<br>Toshiba MK1665GSX<br>WD WD1600BEVT-22A23T0 | | | | Seagate ST9250315AS<br>HGST HTS545025B9A300<br>Toshiba MK2565GSX<br>WD WD2500BEVT | | | |
| Bytes per sector | 512 | | | | | | | |
| Data heads | 2 | | 1 | | 2 | | 3 | 2 |
| Drive Format | | | | | | | | |
| Disks | 1 | | 1 | | 1 | | 2 | 1 |
| Spindle speed (RPM) | 5400 | | | | | | | |
| Performance Specifications | | | | | | | | |
| Buffer size | 8 MB | | | | | | | |
| Interface | SATA | | | | | | | |
| Max. Media Transfer Rate (Mbytes/sec max.) | 300 | 300 | | 300 | 300 | 300 | 384 | 300 |
| Max. Data Transfer Rate (Mbytes/sec) | 1175 | 875 | | 108544 | 1175 | 875 | 1031 | 108544 |
| DC Power Requirements | | | | | | | | |
| Voltage tolerance | 5V ±5% | | | | | | | |

### Hard Disk Drive Interface (continued)

| Item | Specification | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Capacity (GB) | 320 | | | | 500 | | | |
| Vendor & Model Name | Seagate ST9320310AS<br>HGST HTS545032B9A300<br>Toshiba MK3265GSX<br>WD WD3200BPVT-22ZEST0 | | | | Seagate ST9500325AS<br>HGST HTS545050B9A300<br>Toshiba MK5065GSX<br>WD WD5000BEVT-22A0RT0 | | | |
| Bytes per sector | 512 | | | | | | | |
| Data heads | 3 | | 2 | 2 | 4 | | | 2 |
| Drive Format | | | | | | | | |
| Disks | 2 | 2 | 1 | | 1 | 2 | 2 | 1 |
| Spindle speed (RPM) | 5400 | | | | | | | |
| Performance Specifications | | | | | | | | |
| Buffer size | 8 MB | | | | | | | |
| Interface | SATA | | | | | | | |
| Max. Media Transfer Rate (Mbytes/sec max.) | 300 | 300 | 384 | 300 | 300 | 300 | 384 | 300 |
| Max. Data Transfer Rate (Mbytes/sec) | 1175 | 112000 | 1273 | 108544 | 1175 | 112000 | 1031 | 108544 |



Downloaded from www.Manualslib.com manuals search engine

| Item | Specification |
|---|---|
| DC Power Requirements | |
| Voltage tolerance | 5V ±5% |

**Hard Disk Drive Interface (continued)**

| Item | Specification | |
|---|---|---|
| Capacity (GB) | 640 | 750 |
| Vendor & Model Name | Toshiba MK6465GSX<br>Western Digital WD6400BEVT-22A0RT0 | Western Digital WD7500BPVT-22HXZT1 |
| Bytes per sector | 512 | |
| Data heads | 4 | 4 |
| Drive Format | | |
| Disks | 2 | 1 |
| Spindle speed (RPM) | 5400 | |
| Performance Specifications | | |
| Buffer size | 8 MB | |
| Interface | SATA | |
| Max. Media Transfer Rate (Mbytes/sec max.) | 300 | |
| Max. Data Transfer Rate (buffer to/from media) (Mbytes/sec) | 1273, 108544 | 108544 |
| DC Power Requirements | | |
| Voltage tolerance | 5V ±5% | |

**USB Port**

| Item | Specification |
|---|---|
| Chipset | ICH9-M |
| USB compliance level | USB 2.0 |
| EHCI | USB 1.1 and USB 2.0 Host controller |
| Number of USB port(s) | 3 |
| Location | 2 on the right, 1 on the left |
| Serial port function control | ICH9-M |



Downloaded from www.Manualslib.com manuals search engine

### Audio Subsystem

| Item | Specification |
|---|---|
| Audio Controller | Realtek ALC271 |
| Chipset | ICH9-M |
| Speaker Amplifier | G1453R41U |
| Audio port | |
| Internal | |
| Compatibility | • Analog jacks (port-A, B, C, E and G) support stereo input and output re-tasking<br>• Support MONO output at port -H<br>• Port-A/D/E/F built in headphone amplifiers<br>• Supports external PCBEEP input and built -in digital BEEP generator<br>• Meets Microsoft WLP (Windows Logo Program) audio requirements |
| Sampling rate | Primary 16/20/24-bit<br>Secondary 16/20/24-bit |
| External | Mic jack<br>Headphone/speaker/line-out jack |
| Internal speaker/ quantity | Yes/1 (1W speakers) |

### Video Interface

| Item | Specification |
|---|---|
| Chipset | Integrated GL40 (Cantiga GM Chip) / ATI-Park |
| Package | 34 mm X 34 mm, 0.7-mm ball pitch |
| Interface | LVDS / CRT |
| Compatibility | 1366x768/60Hz(16:9) / 1280x720/60Hz(16:9) / 1024x768/60Hz(4:3) / 800x600/60Hz(4:3) |
| Sampling rate | 60Hz |

### VRAM (Not available with this model)

| Item | Specification | |
|---|---|---|
| Chipset | | |
| Memory size | | |
| Interface | | |

### HDMI Port

| Item | Specification |
|---|---|
| Compliance level | 1.3 compliant |
| Throughput | Up to 2.5Gbps per lane (250MHz pixel clock) |
| Number of HDMI port(s) | 1 |
| Location | Left side |



Downloaded from www.Manualslib.com manuals search engine

**PCMCIA Port (Not available in this model)**

| Item | Specification |
|---|---|
| PCMCIA controller | |
| Supports card type | |
| Number of slots | |
| Access location | |
| Supports ZV (Zoomed Video) port | |
| Supports 32-bit CardBus | |

**Super-Multi Drive Module**

| Item | Specification | | | |
|---|---|---|---|---|
| Vendor & model name | HLDS GT32N | | Panasonic UJ8A0PSNAA-A | |
| Performance Specification | With CD Diskette | With DVD Diskette | With CD Diskette | With DVD Diskette |
| Transfer rate (MB/sec) | Sustained:<br>3.6 MB/s (24x) max. | Sustained:<br>11.08 MB/s (8x) max. | max. 24x CAV (max. 3.6 MB/s) | max. 8X CAV (max. 10.8 MB/s) |
| Buffer Memory | 1 MB | | | |
| Interface | SATA | | | |
| Applicable disc formats | 4.7GB (Single Layer) 8.5GB (Dual Layer)<br>DVD-R: 3.95GB (Ver. 1.0: read only)<br>4.7GB (Ver. 2.0 for Authoring: read only)<br>4.7GB (Ver. 2.1 for General: read & write)<br>(DL)8.5GB (Ver. 3.0)<br>DVD-RW:4.7GB (Ver. 1.2/ Rev 1.0, 2.0, 3.0)<br>DVD-RAM:4.7GB/side (Ver. 2.2)<br>DVD+R: 4.7GB (Ver. 1.3)(DL) 8.5GB (Ver. 1.1)<br>DVD+RW: 4.7GB (Vol.1 Ver.1.3)<br><br>CD-ROM Mode-1 data disc<br>CD-ROM Mode-2 data disc<br>CD-ROM XA, CD-I, Photo-CD Multi-Session, Video CD<br>CD-Audio Disc<br>Mixed mode CD-ROM disc (data and audio)<br>CD-Extra<br>CD-Text<br>CD-R (Conforming to “Orange Book Part 2”: read & write)<br>CD-RW (Conforming to “Orange Book Part 3”: read & write) | | DVD-VIDEO, DVD-ROM, DVD-R(4.7GB), DVD-R DL DVD-RW(Ver.1.1/1.2) DVD+R, DVD+R DL, DVD+RW DVD-RAM(4.7GB)<br><br>CD-DA,CD-ROM,CD-ROM XA<br>PhotoCD(muiltiSession)<br>Video CD,Cd-Extra(CD+),CD-text | |



Downloaded from www.Manualslib.com manuals search engine

| Item | Specification |
|---|---|
| Loading mechanism | Drawer type manual load<br>Electrical release<br>Emergency Release (draw open hole) |
| Power Requirement | |
| Input Voltage | DC 5 V +/- 5% |

**Super-Multi Drive Module** (continued)

| Item | Specification | | | |
|---|---|---|---|---|
| Vendor & model name | PLDS DS8A4SH | | Sony AD7585H | |
| Performance Specification | With CD Diskette | With DVD Diskette | With CD Diskette | With DVD Diskette |
| Transfer rate (MB/sec) | Sustained:<br>- CD-ROM inside 1.45 MB/s (min.)<br>- CD-ROM outside 3.5 MB/s (min.) | Sustained:<br>- DVD-ROM inside 3.7 MB/s (min.)<br>- DVD-ROM outside 10 MB/s (min.) | Sustained:<br>- CD-ROM inside 1.57 MB/s (typical)<br>- CD-ROM outside 3.65 MB/s (typical) | Sustained:<br>- DVD-ROM inside 4.57 MB/s (typical)<br>- DVD-ROM outside 10.99 MB/s (typical) |
| Buffer Memory | 2 MB | | 2 MB | |
| Interface | SATA | | SATA | |
| Applicable disc formats | DVD-ROM, DVD-Video, DVD-Audio, DVD-RW<br>DVD+RW<br>DVD-R single/multi border(s)<br>DVD+R single/multi session(s)<br>DVD-R9 single/multi border(s)<br>DVD+R9 single/multi session(s)<br>DVD-RAM<br><br>CD-DA, CD-TEXT, CD ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Form-2,<br>CD-I Ready, Video-CD (MPEG-1), Photo-CD, Enhance CD,<br>CD extra, UDF (fixed/variable Packet mode) | | DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-Video, DVD-Audio, SACD (Hybrid),<br>UDF DVD, DVD-R, DVD-R DL, DVD-R 3.95 GB, DVD-R Authoring, DVD-R Multi-Border,<br>DVD-R Download (DVD-R CSS, Qflix), DVD-RW, DVD-RW DL, DVD+R, DVD+R, DVD Data & Video<br><br>CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-i, CD-i<br>Bridge, Video-CD (MPEG-1), Karaoke CD, Photo-CD, Enhanced CD, CD Plus, CD Extra, itrax<br>CD, CD-Text, UDF CD, CD-R, and CD-RW, CD-DA, CD-ROM Mode-1, CD-ROM/XA Mode-2 Form-1 and Mode-2 Form-2, CD-i, Video-CD, CD-Text | |
| Loading mechanism | Manual load/ Plunger system | | | |
| Power Requirement | | | | |
| Input Voltage | DC 5 V +/- 5% | | | |



Downloaded from www.Manualslib.com manuals search engine

**Super-Multi Drive Module** (continued)

| Item | Specification | |
|---|---|---|
| Vendor & model name | Toshiba TSL633F | |
| Performance Specification | With CD Diskette | With DVD Diskette |
| Transfer rate (MB/sec) | Sustained:<br>- CD-ROM/R Read (Mode1) Max 3.6 MB/sec<br>- CD-RW Read (Mode1) Max 3.6 MB/sec | Sustained:<br>- DVD-Single Read Max 10.8 MB/sec<br>- DVD-ROM Dual Read Max 10.8 MB/sec<br>- DVD±R Dual Read Max 8.1 MB/sec<br>- DVD-RAM Read Max 6.75 MB/sec |
| Buffer Memory | 2 MB | |
| Interface | SATA | |
| Applicable disc formats | DVD-ROM (Book 1.02), DVD-Dual<br>DVD-Video (Book 1.1)<br>DVD-R (Book 1.0, 3.9G)<br>DVD-R (Book 2.0, 4.7G) - General & Authoring<br>DVD+R (Version 1.0)<br>DVD+RW<br>DVD-RW (Non CPRM & CPRM)<br>DVD±R Dual<br>DVD-RAM<br><br>CD-DA (Red Book) - Standard Audio CD & CD-TEXT<br>CD-ROM (Yellow Book Mode1 & 2) - Standard Data<br>CD-ROM XA (Mode2 Form1 & 2) - Photo CD, Multi-Session<br>CD-I (Green Book, Mode2 Form1 & 2, Ready, Bridge)<br>CD-Extra/ CD-Plus (Blue Book) - Audio & Text/Video<br>Video-CD (White Book) - MPEG1 Video<br>CD-R (Orange Book Part áU)<br>CD-RW & HSRW (Orange Book PartáV Volume1 & Volume2)<br>Super Audio CD (SACD) Hybrid type<br>US & US+ CD-RW | |
| Loading mechanism | Drawer (Solenoid Open)<br>Tact SW (Open)<br>Emergency Release (draw open hole) | |
| Power Requirement | | |
| Input Voltage | DC 5 V +/- 5% | |

**Keyboard Controller**

| Item | Specification |
|---|---|
| Controller | WPC781 |
| Total number of keypads | 86 key for US/CA, 87 key for FR/SP/GM, 89 key for JP 19mm |
| Hotkeys | Standby, wireless/BT enable/disable, brightness up/down, LCD/CRT.<br>See “Hot Keys” on page 15. |



Downloaded from www.Manualslib.com manuals search engine

### I/O Ports

| Item | Specification |
|---|---|
| I/O support | • Multi-in-1 card reader (SD™, MMC, MS, MS PRO, xD)<br>• Three USB 2.0 ports<br>• External display (VGA) port<br>• Headphone/speaker/line-out jack<br>• Microphone-in jack<br>• Ethernet (RJ-45) port<br>• Modem (RJ-11) port<br>• DC-in jack for AC adapter<br>• Port replicator connector |

### Main Battery

| Item | Specification | | | | |
|---|---|---|---|---|---|
| | 6 Cell | | | | |
| Vendor | Simplo | Panasonic | Sanyo | Samsung | Sony |
| Part name | AS10D71 | AS10D51 | 3UR18650-2-T0590 | AS10D61AH A63222537 | AS10D41 |
| Battery Type | Li-ion | | | | |
| Pack capacity | 4400mAh | | | | |
| Normal voltage | 11.1V | 10.8V | 10.8V | 10.8V | 10.8V |
| Charge voltage | 12.6V | | | | |
| Fast charge current | 3520 mA | 3010 mA | 3520 mA | 3520 mA | 3520 mA |

### RTC Battery

| Item | Specification |
|---|---|
| Part name | Maxell ML1220 |
| Pack capacity | 14mA/hr. |
| Normal voltage | 3V |

### LCD Inverter (Not available in this model)

| Item | Specification |
|---|---|
| Vendor & model name | |
| Brightness conditions | |
| Input voltage (v) | |
| Input current (mA) | |
| Output voltage (V, RMS) | |
| Output current (mA, RMS) | |
| Output voltage frequency (KHz) | |



Downloaded from www.Manualslib.com manuals search engine

**External Display Supported Resolution**

| Resolution | 24 bits | 30 bits | 36 bits | 48 bits |
|---|---|---|---|---|
| 640X480p/60Hz 4:3 | Yes | NA | NA | NA |
| 720X480p/60Hz 4:3 | NA | NA | NA | NA |
| 640X480p/60Hz 16:9 | NA | NA | NA | NA |
| 1280X720p/60Hz 16:9 | Yes | NA | NA | NA |
| 1920X1080p/60Hz 16:9 | Yes | NA | NA | NA |
| 1440X480p/60Hz 4:3 | NA | NA | NA | NA |
| 1440X480p/60Hz 16:9 | NA | NA | NA | NA |
| 1920X1080p/50Hz 16:9 | Yes | NA | NA | NA |
| 720X576p/50Hz 4:3 | Yes | NA | NA | NA |
| 720X576p/50Hz 16:9 | NA | NA | NA | NA |
| 1280X720p/50Hz 16:9 | Yes | NA | NA | NA |
| 1920X1080i/50Hz 16:9 | Yes | NA | NA | NA |
| 1440X576i/50Hz 4:3 | NA | NA | NA | NA |
| 1440X576i/50Hz 16:9 | NA | NA | NA | NA |
| 1920X1080p/50Hz 16:9 | Yes | NA | NA | NA |

**LCD**

| Item | Specification | | | |
|---|---|---|---|---|
| Vendor/model name | AUO<br>B140XW01 V8 | Chimei<br>BT140GW01 | LG<br>LP140WH1 | Samsung<br>LTN140AT01-G03 |
| Screen Diagonal (mm) | 14” diagonal mm | | | |
| Display Area (mm) | 309.4 x 173.95 mm | | | |
| Display resolution (pixels) | 1366 x 768 | | | |
| Pixel Pitch | 0.2265 x 0.2265 mm | | | |
| Display Mode | Normally white | | | |
| Typical White Luminance ($cd/m^2$) (also called Brightness) | 200 typ.<br>170 min. | 220 typ.<br>200 min. | 220 | 220 typ.<br>190 min. |
| Contrast Ratio (typical) | 500 | 600 | 500 | 500 |
| Response Time (Optical Rise Time/Fall Time) msec | 8 typ. / 16 max. | 8 typ. / 15 max. | | 8 typ. / 12 max. |
| Weight | 350 max. | | | |
| Physical Size (mm) | 324 (H) x 192.5 (V) x 5.2 (D) mm | | | |
| Electrical Interface | 1 channel LVDS | | | |
| Support Color | 16.7 million colors | | | |
| Viewing Angle (up/down/ right/left) | 40 Degrees (L+R),<br>15 Degrees (H),<br>35 Degrees (L) | 40 Degrees (L+R),<br>15 Degrees (H),<br>30 Degrees (L) | 40 Degrees (L+R),<br>10 Degrees (H),<br>30 Degrees (L) | 45 Degrees (L+R),<br>15 Degrees (H),<br>35 Degrees (L) |
| Temperature Range (°C)<br>Operating<br>Storage (shipping) | <br>0 Min. - 50 Max<br>-20 Min. - 60 Max | | | |



Downloaded from www.Manualslib.com manuals search engine

### Camera

| Item | Specification | | |
|---|---|---|---|
| Vendor and model | Chicony CNF9157 | Liteon 09P2SF119 | Suyin<br>F1315-S32B-OV01 |
| Type | CMOS image sensor with SXGA | | |
| Interface | USB 2.0 | | |
| Focusing range | 31.4cm ~ infinity | 32cm ~ infinity | 70 mm |
| Dimensions<br>(L x W x H mm) | 65.0±0.3 X 8.0±0.1 X 3.69+0.11/-0.2 mm | 65.0 x 8.0 x 3.53 ±0.2mm | 65 x 8.0 x 3.74 mm |
| Sensor type | SXGA CMOS sensor | CMOS Image Sensor | |
| Pixel resolution | 1280x1024, 1280x800, 640x480, 352x288, 320x240, 176x144, 160x120 | 1280x1024, 1024x768, 640x480, 350x288, 320x240, 176x144, 160x120 | 1280x1024, 1024x768, 800x600, 640x480, 352x288, 320x240, 176x144, 160x120 |
| Pixel size | 2 um x 2 um | | |
| Image size | 1.3 MP | | |

### Card Reader

| Item | Specification |
|---|---|
| Chipset | AU6437-GBL |
| Features | Secure Digital™ (SD) Card, MultiMediaCard (MMC), Memory Stick™ (MS), Memory Stick PRO™ (MS PRO), xD-Picture Card™ (xD) |

### System LED Indicator

| Item | Specification |
|---|---|
| Drive Activity | Power Led: Blue<br>Suspend: Amber |
| Primary Battery charging state | Amber: Battery Charging |

### AC Adapter

| Item | Specification |
|---|---|
| Input rating | 90 Vac to 264 Vac |
| Maximum input AC current | 132 Vac to 264 Vac |
| Inrush current | 264 Vac; (Cold Start) No damage |
| Efficiency | Meets EPA 2.0 level V requirements |

### Trusted Platform Module (TPM) (Not available with this model)

| Item | Specification |
|---|---|
| Version | |
| Hardware controller | |



Downloaded from www.Manualslib.com manuals search engine

**System Power Management**

| Item | Initial | On | Standby | Suspend | Hibernate | Soft Off |
|---|---|---|---|---|---|---|
| Initial | | 1 | | | | |
| On(S0) | | | 2 | 3 | 4 | 5 |
| Standby(S1) | | 6 | | | | |
| Suspend(S3) | | 7 | | | | |
| Hibernate(S4) | | 8 | | | | |
| Soft Off(S5) | | 9 | | | | |

Mechanical off is a condition where all power except the RTC battery has been removed from the system.

1. Initial to On state: When the AC adapter or Battery pack has been plugged into the system, the I WPC781 will be reset and initial all output pins then the system goes into Initial state and waiting for power on event. If the power button is pressed then the system will go into the ON state.

2. ON to Standby state: The system will go into the Standby state when ICH9M receives the POS command.

3. ON to Suspend state: The system will go into Suspend state when ICH9M receives the S2R command.

4. ON to Hibernate state: The system will go into Hibernate state when ICH9M receives the S2D command.

5. ON to Soft Off state: The system will go into Soft Off state when ICH9M receives the Soft off command.

6. Standby to ON state: The system will go into ON state when the system receives any wake up events, for example, keyboard, mouse.

7. Suspend to ON state: The system will go into ON state when the power button is pressed.

8. Hibernate to ON state: The system will go into ON state when the power button is pressed.

9. Soft Off to ON state: The system will go into ON state when the power button is pressed.



Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

# System Utilities

## BIOS Setup Utility

The BIOS Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/ Output System).

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 4 Troubleshooting when problem arises.

To activate the BIOS Utility, press **F2** during POST (when **Press <F2> to enter Setup** message is prompted on the bottom of screen).

Press **F2** to enter setup. The default parameter of F12 Boot Menu is set to "disabled". If you want to change boot device without entering BIOS Setup Utility, please set the parameter to "enabled".

Press **<F12>** during POST to enter multi-boot menu. In this menu, user can change boot device without entering BIOS SETUP Utility.

### Navigating the BIOS Utility

There are five menu options: Information, Main, Security, Boot, and Exit.

Follow these instructions:

- To choose a menu, use the left and right arrow keys.
- To choose an item, use the up and down arrow keys.
- To change the value of a parameter, press **F5** or **F6**.
- Press **Esc** while you are in any of the menu options to go to the Exit menu.
- In any menu, you can load default settings by pressing **F9**. You can also press **F10** to save any changes made and exit the BIOS Setup Utility.

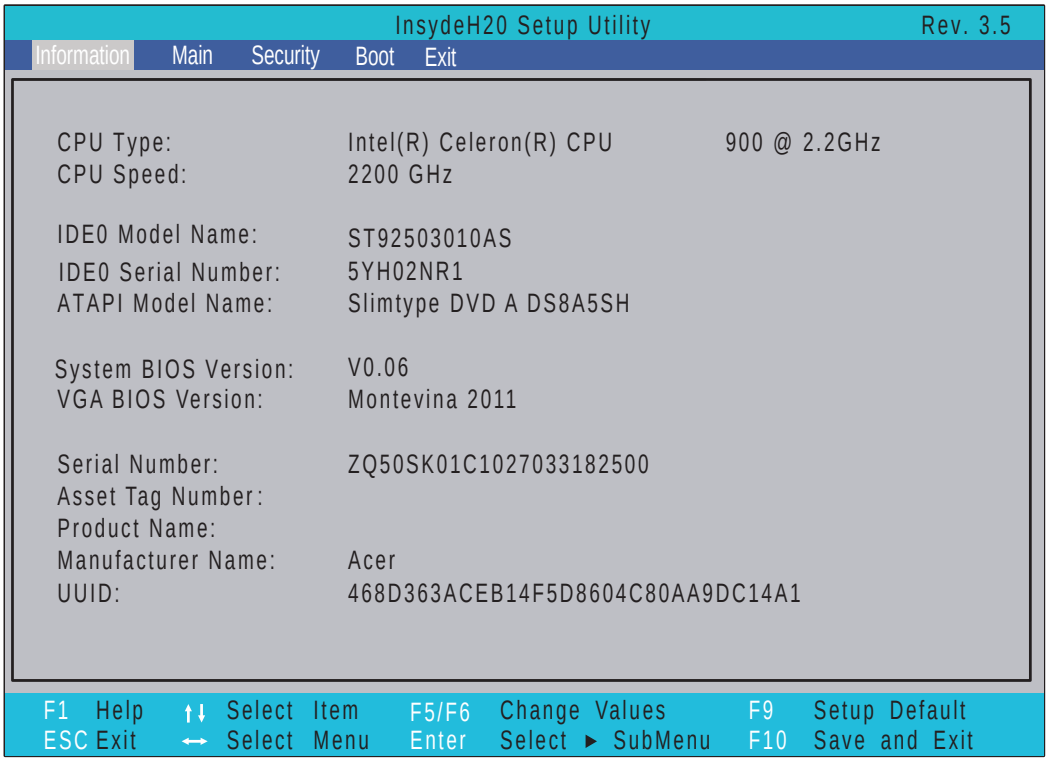
**NOTE:** You can change the value of a parameter if it is enclosed in square brackets. Navigation keys for a particular menu are shown on the bottom of the screen. Help for parameters are found in the Item Specific Help part of the screen. Read this carefully when making changes to parameter values. **Please note that system information is subject to different models**.



Downloaded from www.Manualslib.com manuals search engine

# Information

The Information screen displays a summary of your computer hardware information.


InsydeH20 Setup Utility Rev. 3.5
Information Main Security Boot Exit
CPU Type: Intel(R) Celeron(R) CPU 900 @ 2.2GHz
CPU Speed: 2200 GHz
IDE0 Model Name: ST92503010AS
IDE0 Serial Number: 5YH02NR1
ATAPI Model Name: Slimtype DVD A DS8A5SH
System BIOS Version: V0.06
VGA BIOS Version: Montevina 2011
Serial Number: ZQ50SK01C1027033182500
Asset Tag Number:
Product Name:
Manufacturer Name: Acer
UUID: 468D363ACEB14F5D8604C80AA9DC14A1
F1 Help ↑↓ Select Item F5/F6 Change Values F9 Setup Default
ESC Exit ↔ Select Menu Enter Select ▶ SubMenu F10 Save and Exit

**NOTE:** The system information is subject to different models.

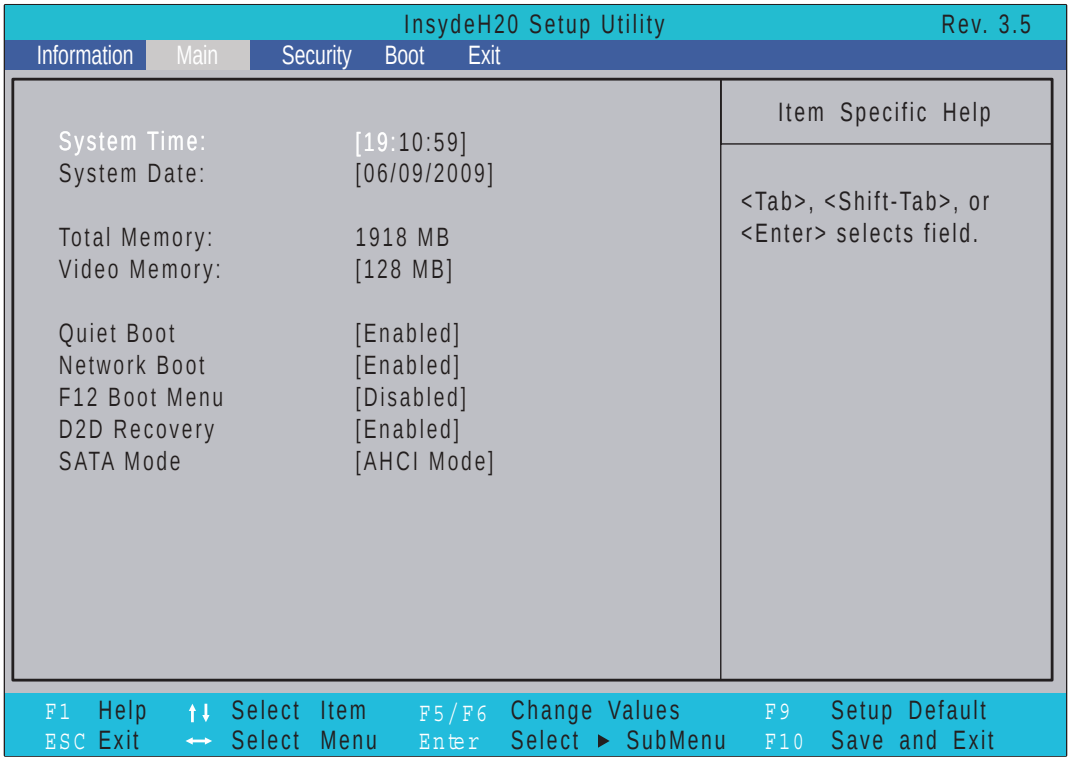
| Parameter | Description |
|---|---|
| CPU Type | This field shows the CPU type and speed of the system. |
| CPU Speed | This field shows the speed of the CPU. |
| IDE0 Model Name | This field shows the model name of HDD installed in the system. |
| IDE0 Serial Number | This field displays the serial number of HDD installed in the system. |
| ATAPI Model Name | This field displays the model name of the installed ODD drive. |
| System BIOS Version | Displays system BIOS version. |
| VGA BIOS Version | This field displays the VGA firmware version of the system. |
| Serial Number | This field displays the serial number of this unit. |
| Asset Tag Number | This field displays the asset tag number of the system. |
| Product Name | This field shows product name of the system. |
| Manufacturer Name | This field displays the manufacturer of this system. |
| UUID | Universally Unique Identifier (UUID) is an identifier standard used in software construction, standardized by the Open Software Foundation (OSF) as part of the Distributed Computing Environment (DCE). |



Downloaded from www.Manualslib.com manuals search engine

# Main

The Main screen allows the user to set the system time and date as well as enable and disable boot option and recovery.




**NOTE:** The screen above is for your reference only. Actual values may differ.

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

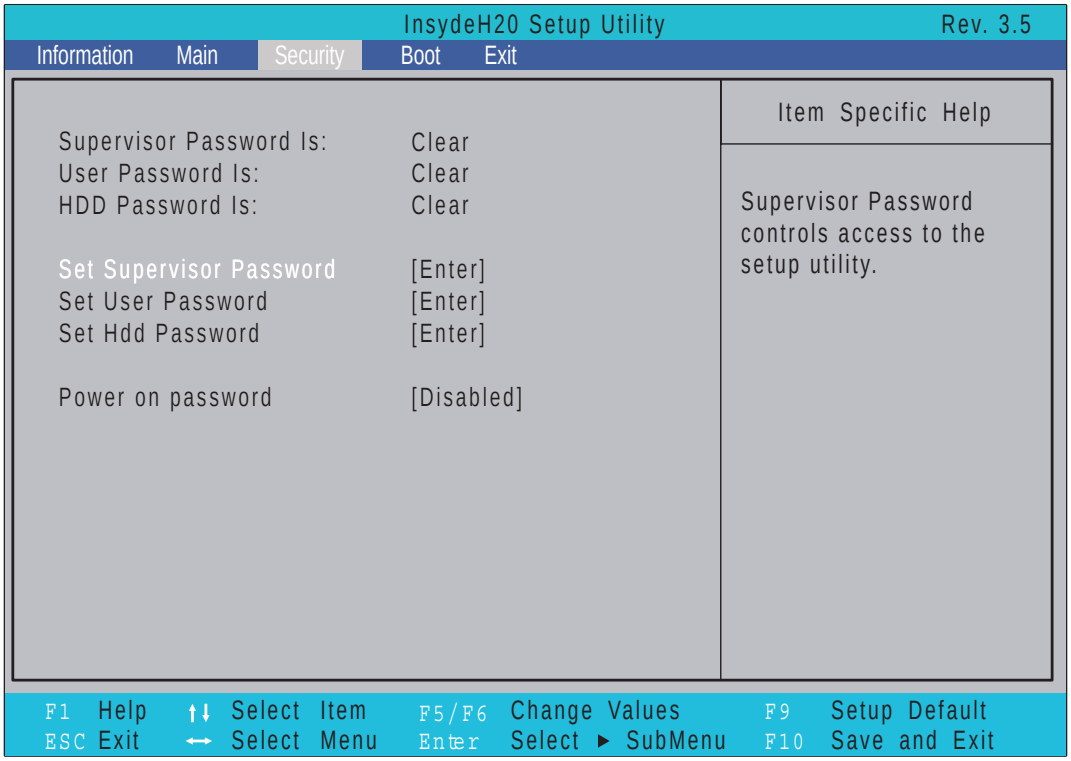
| Parameter | Description | Format/Option |
|---|---|---|
| System Time | Sets the system time. The hours are displayed with 24-hour format. | Format: HH:MM:SS (hour:minute:second) |
| System Date | Sets the system date. | Format MM/DD/YYYY (month/day/year) |
| Total Memory | This field reports the memory size of the system. Memory size is fixed to 4096MB. | N/A |
| Video Memory | Shows the video memory size. VGA Memory size=32 MB | N/A |
| Quiet Boot | This will hide POST messages while booting. | Option: **Enabled** or Disabled |
| Network Boot | Enables, disables the system boot from LAN (remote server). | Option: **Enabled** or Disabled |
| F12 Boot Menu | Enables, disables Boot Menu during POST. | Option: **Disabled** or Enabled |
| D2D Recovery | Enables, disables D2D Recovery function. The function allows the user to create a hidden partition on hard disc drive to store operation system and restore the system to factory defaults. | Option: **Enabled** or Disabled |
| SATA Mode | Control the mode in which the SATA controller should operate. | Option: **AHCI mode** or IDE mode |



Downloaded from www.Manualslib.com manuals search engine

# Security

The Security screen contains parameters that help safeguard and protect your computer from unauthorized use.


InsydeH20 Setup Utility Rev. 3.5
Information Main Security Boot Exit
Item Specific Help
Supervisor Password Is: Clear
User Password Is: Clear
HDD Password Is: Clear
Set Supervisor Password [Enter]
Set User Password [Enter]
Set Hdd Password [Enter]
Power on password [Disabled]
Supervisor Password controls access to the setup utility.
F1 Help ↑↓ Select Item F5/F6 Change Values F9 Setup Default
ESC Exit ↔ Select Menu Enter Select ▶ SubMenu F10 Save and Exit

The table below describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

| Parameter | Description | Option |
|---|---|---|
| Supervisor Password Is | Shows the setting of the Supervisor password | **Clear** or Set |
| User Password Is | Shows the setting of the user password. | **Clear** or Set |
| IDE0 HDD Password Is | Shows the setting of the HDD password | **Clear** or Set |
| Set Supervisor Password | Press Enter to set the supervisor password. When set, this password protects the BIOS Setup Utility from unauthorized access. The user can not either enter the Setup menu nor change the value of parameters. | |
| Set User Password | Press Enter to set the user password. When user password is set, this password protects the BIOS Setup Utility from unauthorized access. The user can enter Setup menu only and does not have right to change the value of parameters. | |
| Set IDE0 Hdd Password | Press Enter to set the HDD password. When set this protects the HDD from unauthorized access. | |
| Power on password | Defines whether a password is required or not while the events defined in this group happened. The sub-options all require the Supervisor password for changes and should be grayed out if the user password was used to enter setup. | **Disabled** or Enabled |

**NOTE:** When you are prompted to enter a password, you have three tries before the system halts. Don't forget the password. If you forget the password, you may have to reset the computer.



Downloaded from www.Manualslib.com manuals search engine

## Setting a Password

Follow these steps as you set the user or the supervisor password:

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Supervisor Password box appears:

2. Type a password in the “Enter New Password” field. The password length can not exceeds 8 alphanumeric characters (A-Z, a-z, 0-9, not case sensitive). Retype the password in the “Confirm New Password” field.

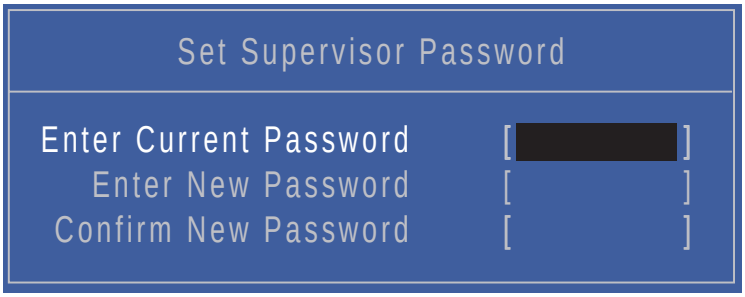
**IMPORTANT:**Be very careful when typing your password because the characters do not appear on the screen.

3. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
4. If desired, you can opt to enable the Password on boot parameter.
5. When you are done, press F10 to save the changes and exit the BIOS Setup Utility.

## Removing a Password

Follow these steps:

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Password box appears:



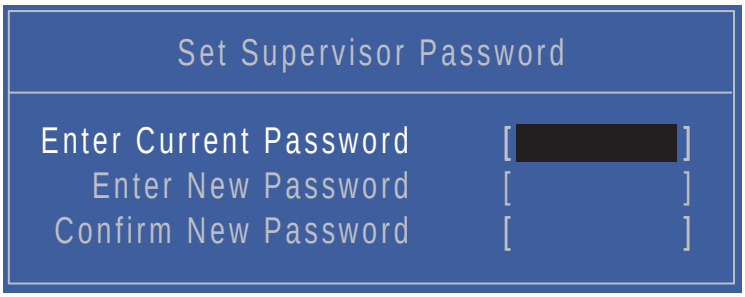

2. Type the current password in the Enter Current Password field and press **Enter**.
3. Press **Enter** twice **without** typing anything in the Enter New Password and Confirm New Password fields. The computer then sets the Supervisor Password parameter to “Clear”.



Downloaded from www.Manualslib.com manuals search engine

## Changing a Password

1. Use the ↑ and ↓ keys to highlight the Set Supervisor Password parameter and press the **Enter** key. The Set Supervisor Password box appears.




2. Type the current password in the Enter Current Password field and press **Enter**.
3. Type a password in the Enter New Password field. Retype the password in the Confirm New Password field.
4. Press **Enter**. After setting the password, the computer sets the User Password parameter to “Set”.
5. If desired, you can enable the Password on boot parameter.
6. When you are done, press **F10** to save the changes and exit the BIOS Setup Utility.

If the verification is OK, the screen will display as following.

The password setting is complete after the user presses **Enter**.

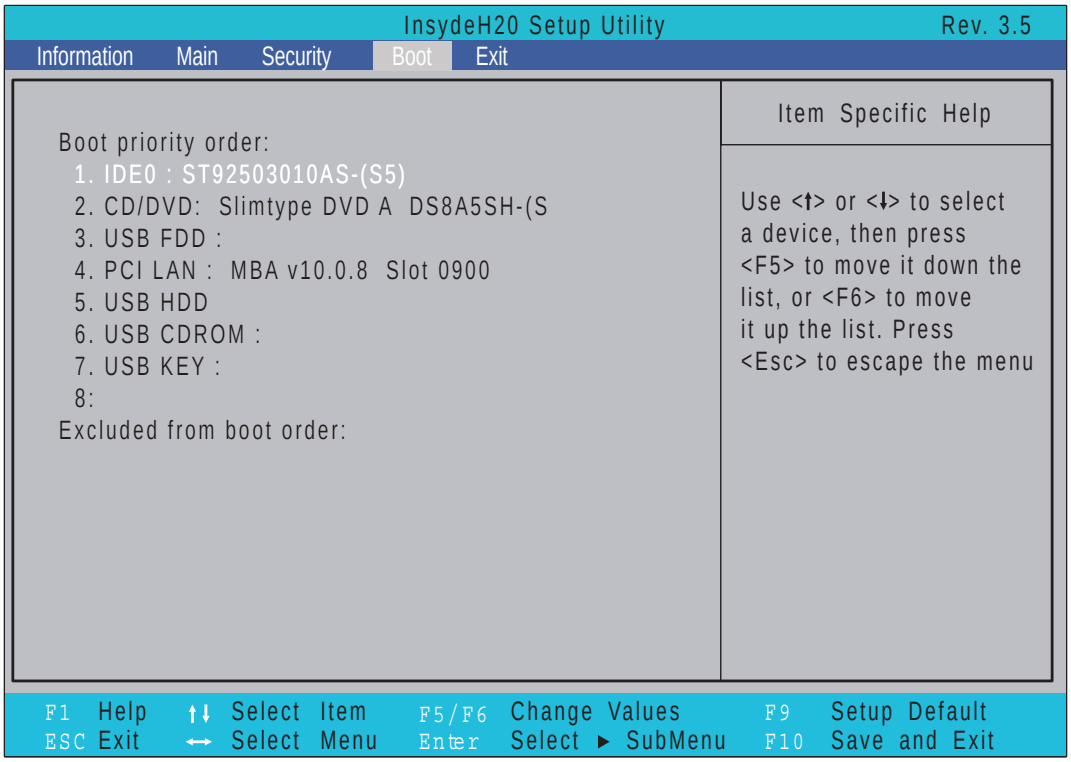
If the current password entered does not match the actual current password, the screen will show you the Setup Warning.

If the new password and confirm new password strings do not match, the screen displays the following message.

Downloaded from www.Manualslib.com manuals search engine

# Boot

This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices includes the USB diskette drives, the onboard hard disk drive and the DVD drive in the module bay.

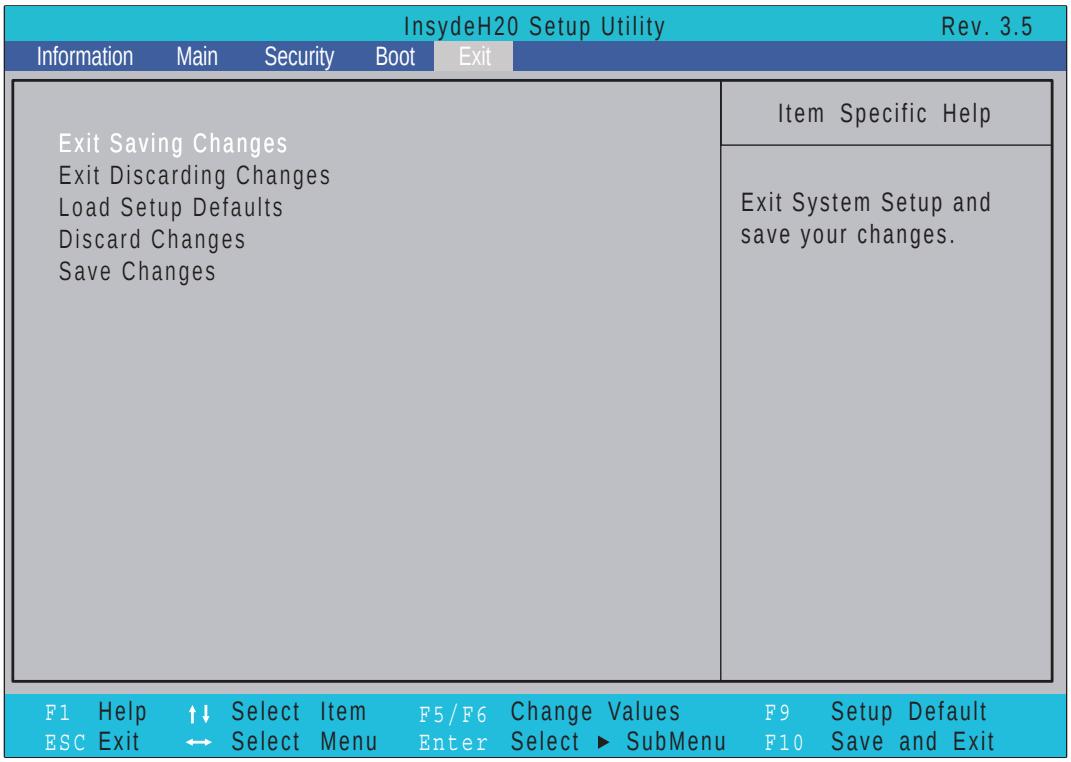

InsydeH20 Setup Utility
Rev. 3.5
Information
Main
Security
Boot
Exit
Boot priority order:
1. IDE0 : ST92503010AS-(S5)
2. CD/DVD: Slimtype DVD A DS8A5SH-(S
3. USB FDD :
4. PCI LAN : MBA v10.0.8 Slot 0900
5. USB HDD
6. USB CDROM :
7. USB KEY :
8:
Excluded from boot order:
Item Specific Help
Use <↑> or <↓> to select a device, then press <F5> to move it down the list, or <F6> to move it up the list. Press <Esc> to escape the menu
F1 Help ↑↓ Select Item F5/F6 Change Values F9 Setup Default
ESC Exit ↔ Select Menu Enter Select ▶ SubMenu F10 Save and Exit



Downloaded from www.Manualslib.com manuals search engine

# Exit

The Exit screen allows you to save or discard any changes you made and quit the BIOS Utility.




The table below describes the parameters in this screen.

| Parameter | Description |
|---|---|
| Exit Saving Changes | Exit System Setup and save your changes to CMOS. |
| Exit Discarding Changes | Exit utility without saving setup data to CMOS. |
| Load Setup Default | Load default values for all SETUP item. |
| Discard Changes | Load previous values from CMOS for all SETUP items. |
| Save Changes | Save Setup Data to CMOS. |



Downloaded from www.Manualslib.com manuals search engine

# BIOS Flash Utility

The BIOS flash memory update is required for the following conditions:

- New versions of system programs
- New features or options
- Restore a BIOS when it becomes corrupted.

## DOS Flash Utility

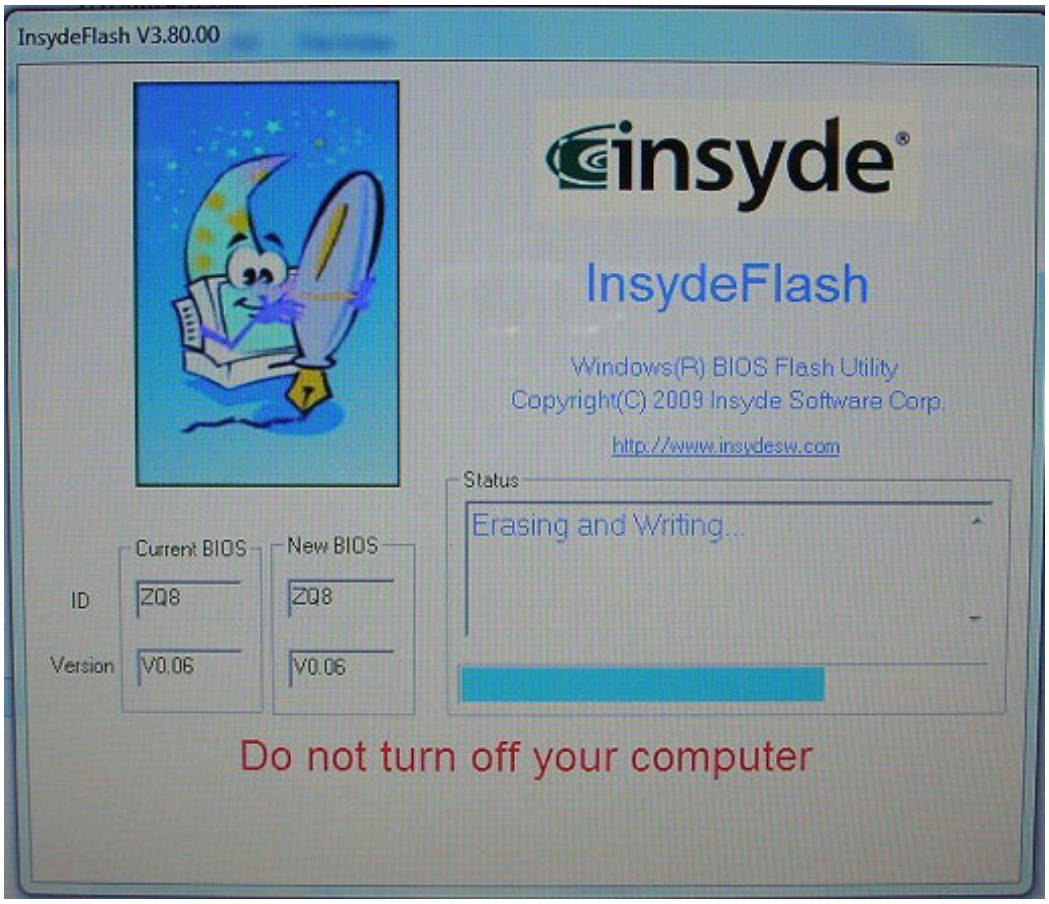
Perform the following steps to use the DOS Flash Utility:

1. Copy ZQ5v0.08.exe to a USB stick.
2. **Boot to DOS mode.**
3. **Execute ZQ5v0.08.exe in DOS mode to begin the flash process. The system will restart automatically when finished.**

## WinFlash Utility

Perform the following steps to use the WinFlash Utility:

1. Double click the WinFlash executable (ZQ5_100W.exe)
2. Click **OK** to begin the update. A progress screen will display the current state of BIOS flash process.





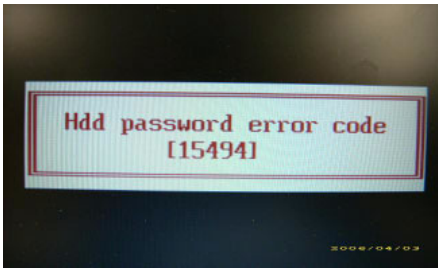

Downloaded from www.Manualslib.com manuals search engine

# Remove HDD/BIOS Password Utilities

This section provides you with details about removing HDD/BIOS password:

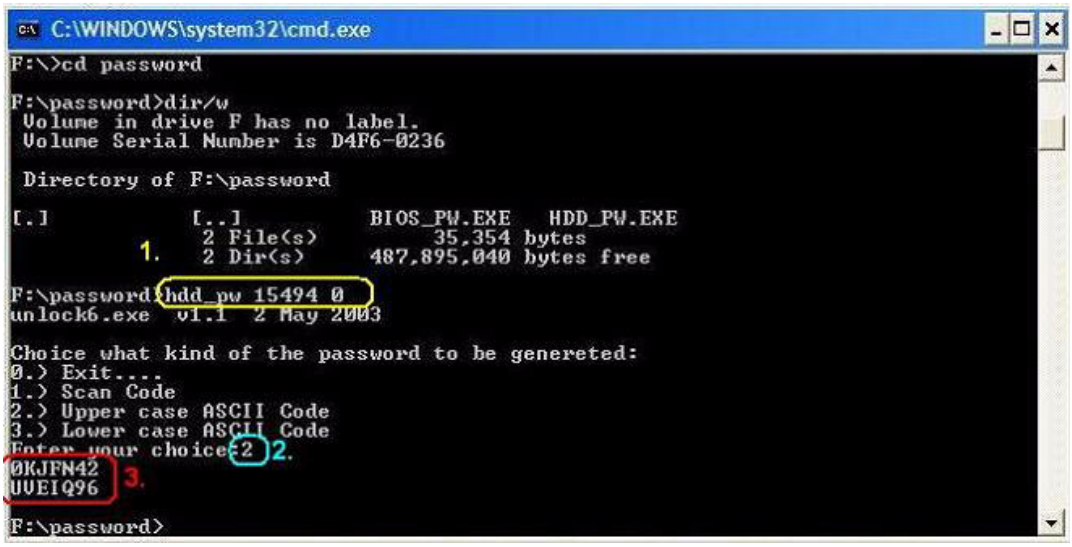
**Remove HDD Password:**

If you key in the wrong HDD password three times, an error is generated.




To reset the HDD password, perform the following steps:

1. On another computer, run HDD_PW.exe.
2. Enter “hdd_pw 15494 0”
3. Chose one (1) of the generated passwords.




4. Reboot the locked computer and key in one of the passwords from number 3 above.

Downloaded from www.Manualslib.com manuals search engine

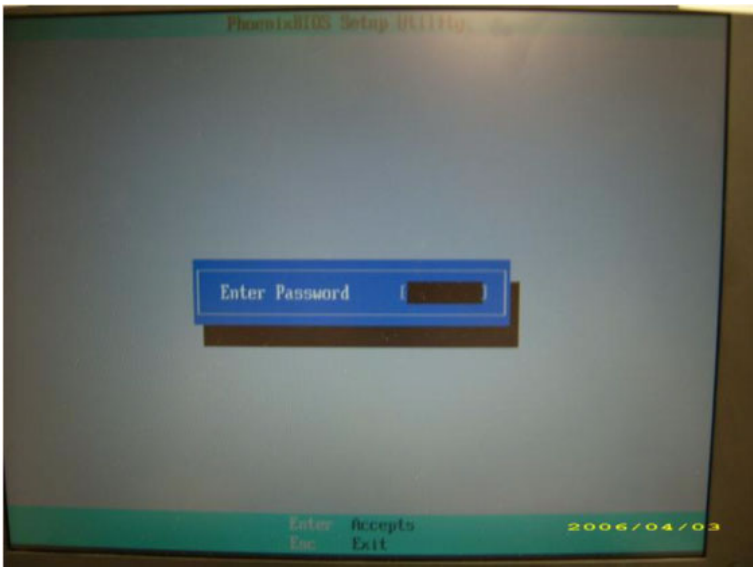
# Removing BIOS Passwords:

If you key in the wrong Supervisor Password three times, System Disabled displays on the screen as below.

To reset the BIOS password, run BIOS_PW.EXE on a second machine as follows:

1. At a command prompt, type **bios_pw 14452 0**.
2. Select one string from the list.

3. Reboot the system and type the selected string (in this example qjjg9vy or 07yqmjd etc.) for the BIOS user password.



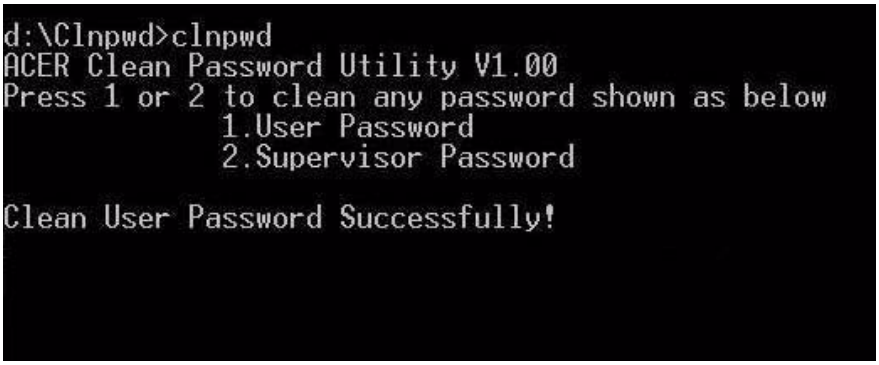



Downloaded from www.Manualslib.com manuals search engine

# Cleaning BIOS Passwords

To clear the password, perform the following steps:

1. From a DOS prompt, Execute **clnpwd.exe**


d:\Clnpwd>clnpwd
ACER Clean Password Utility V1.00
Press 1 or 2 to clean any password shown as below
1.User Password
2.Supervisor Password
Clean User Password Successfully!

2. Press 1 or 2 to clean the desired password shown on the screen.

The onscreen message determines whether the function is successful or not.



Downloaded from www.Manualslib.com manuals search engine

# Miscellaneous Utilities

## Using Boot Sequence Selector

Boot Sequence Selector allows the boot order to be changes without accessing the BIOS. To use Boot Sequence Selector, perform the following steps:

1. Enter into DOS.
2. Execute BS.exe to display the usage screen.

d:\BOOTSEQ>bs
*** Boot Sequence Selecter Version 0.03 ***
Create by Rockwell Chuang 10/01/2005.
Usage:
BS [ 1 | 2 | 3 | 4 ]
BS 1 : [ Floppy ] => [HardDisk] => [ CD-ROM ] => [ LAN ]
BS 2 : [HardDisk] => [ CD-ROM ] => [ LAN ] => [ Floppy ]
BS 3 : [ CD-ROM ] => [HardDisk] => [ LAN ] => [ Floppy ]
BS 4 : [ LAN ] => [ Floppy ] => [HardDisk] => [ CD-ROM ]
d:\BOOTSEQ>

3. Select the desired boot sequence by entering the corresponding sequence, for example, enter BS2 to change the boot sequence to HDD|CD ROM|LAN|Floppy.

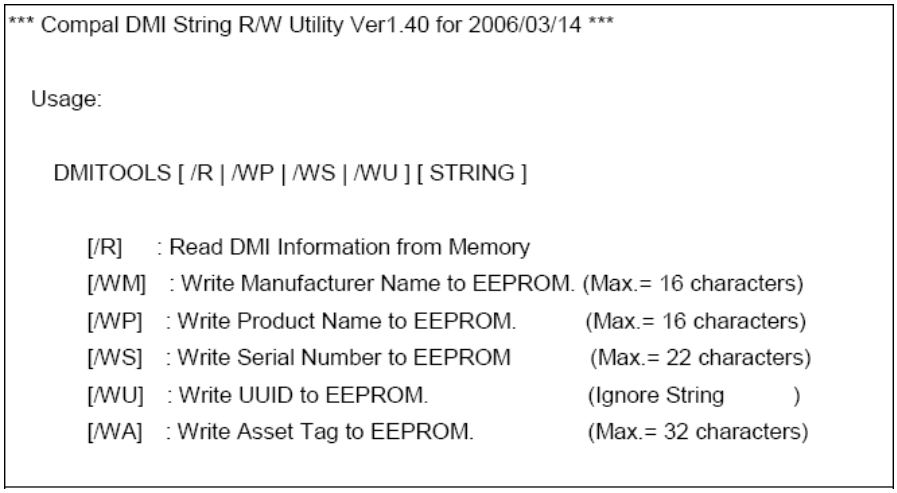
## Using DMITools

The DMI (Desktop Management Interface) Tool copies BIOS information to eeprom to be used in the DMI pool for hardware management.

When the BIOS displays **Verifying DMI pool data** it is checking the table correlates with the hardware before sending to the operating system (Windows, etc.).

To update the DMI Pool, perform the following steps:

1. Enter into DOS.
2. Execute **dmitools.exe**. The following messages show dmitools usage:


*** Compal DMI String R/W Utility Ver1.40 for 2006/03/14 ***
Usage:
DMITOOLS [ /R | /WP | /WS | /WU ] [ STRING ]
[/R] : Read DMI Information from Memory
[/WM] : Write Manufacturer Name to EEPROM. (Max.= 16 characters)
[/WP] : Write Product Name to EEPROM. (Max.= 16 characters)
[/WS] : Write Serial Number to EEPROM (Max.= 22 characters)
[/WU] : Write UUID to EEPROM. (Ignore String )
[/WA] : Write Asset Tag to EEPROM. (Max.= 32 characters)

**IMPORTANT:**The following write examples (2 to 5) require a system reboot to take effect



Downloaded from www.Manualslib.com manuals search engine

### Example 1: Read DMI Information from Memory

Input:

dmitools /r

Output:

Manufacturer (Type1, Offset04h): Acer

Product Name (Type1, Offset05h): NS41 xxxxx

Serial Number (Type1, Offset07h): 01234567890123456789

UUID String (Type1, Offset08h): xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx

Asset Tag (Type3, Offset04h): Acer Asstag

### Example 2: Write Product Name to EEPROM

Input:

dmitools /wp Acer

### Example 3: Write Serial Number to EEPROM

Input:

dmitools /ws 01234567890123456789

### Example 4: Write UUID to EEPROM

Input:

dmitools /wu

### Example 5: Write Asset Tag to EEPROM

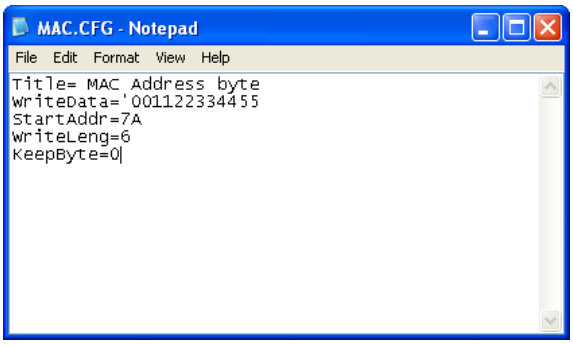
Input:

dmitools /wa Acer Asstag

## Using the LAN MAC Utility

Perform the following steps to write MAC information to eeprom:

1. Use a text editor, for example Notepad, to edit the MAC.CFG file as shown:




   - WriteData= '001122334455' <------- MAC value
   - StartAddr=7A <------- MAC address
   - WriteLeng=6 <------- MAC value length
   - KeepByte=0 <------- can be any value
2. Boot into DOS.
3. Execute **MAC.BAT** to write MAC information to eeprom.



Downloaded from www.Manualslib.com manuals search engine

Chapter 3

# Machine Disassembly and Replacement

**IMPORTANT:**The outside housing and color may vary from the mass produced model.

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

## Disassembly Requirements

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Flat screwdriver
- Philips screwdriver
- Plastic flat screwdriver
- Plastic tweezers

**NOTE:** The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components.



Downloaded from www.Manualslib.com manuals search engine

# Pre-disassembly Instructions

Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.

3. Place the system on a flat, stable surface.



Downloaded from www.Manualslib.com manuals search engine

# Disassembly Process

The disassembly process is divided into the following stages:

- External module disassembly
- Main unit disassembly
- LCD module disassembly

The flowcharts provided in the succeeding disassembly sections illustrate the entire disassembly sequence. Observe the order of the sequence to avoid damage to any of the hardware components. For example, if you want to remove the mainboard, you must first remove the keyboard, then disassemble the inside assembly frame in that order.

**Main Screw List**

| Screw | Quantity | Part Number |
|---|---|---|
| M2.0*3.0-I | 15 | 86.ARE07.002 |
| M2.5*4.0-I | 9 | 86.R6Z07.001 |
| M2.5*5.0-I | 2 | 86.T23V7.010 |
| M2.5*6.5-I | 22 | 86.ARE07.001 |
| M3.0X3.5-NIH | 4 | 86.N1407.007 |
| M2-0.4*2-I | 1 | 86.W4107.002 |



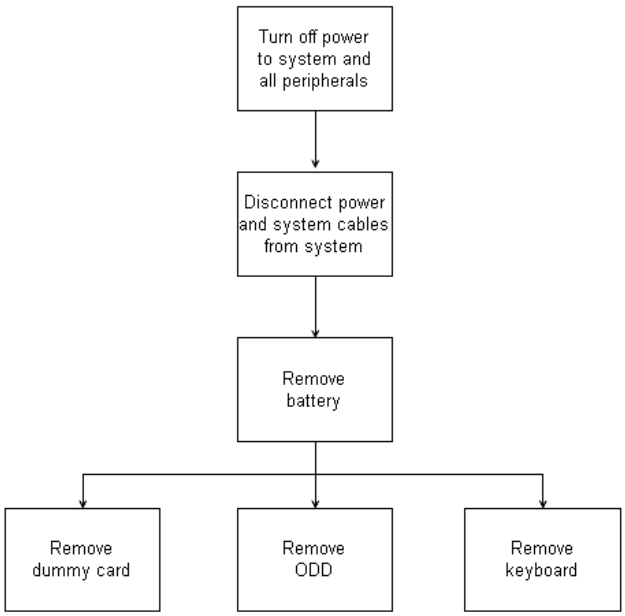
Downloaded from www.Manualslib.com manuals search engine

# External Modules Disassembly Process

**IMPORTANT:**The outside housing and color may vary from the mass produced model.

## External Modules Disassembly Flowchart

The flowchart below gives you a graphic representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the mainboard, you must first remove the keyboard, then disassemble the inside assembly frame in that order.


Turn off power to system and all peripherals
Disconnect power and system cables from system
Remove battery
Remove dummy card
Remove ODD
Remove keyboard

**Screw List**

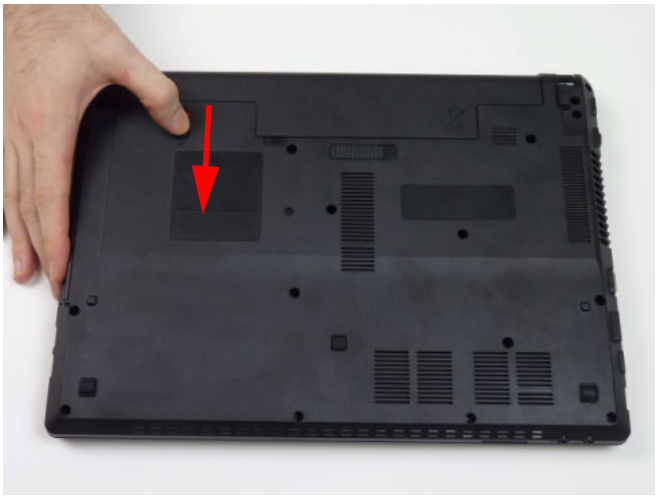
| Step | Screw | Quantity | Part No. |
|---|---|---|---|
| ODD Module Disassembly | M2.5*6.5-I | 1 | 86.ARE07.001 |
| ODD Bracket Disassembly | M2.0*3.0-I | 2 | 86.ARE07.002 |



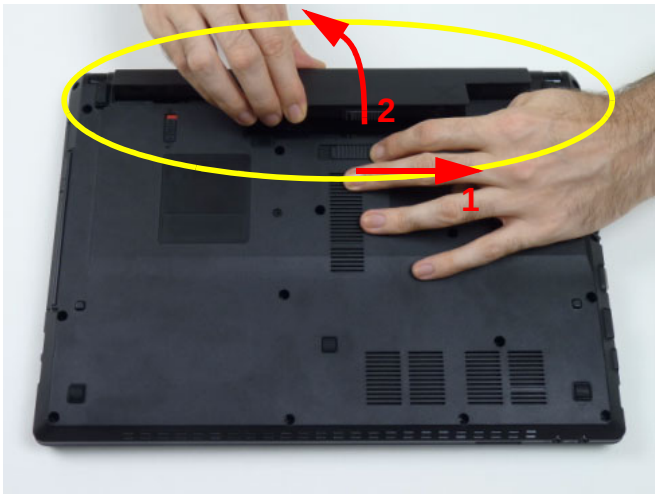
Downloaded from www.Manualslib.com manuals search engine

# Removing the Battery Pack

1. Turn the computer over. Slide the battery lock in the direction shown.



2. Slide and hold the battery release latch to the release position (1), then lift out the battery pack from the main unit (2).




**NOTE: Please detach the battery and follow local regulations for disposal.**



Downloaded from www.Manualslib.com manuals search engine

# Removing the SD Dummy Card

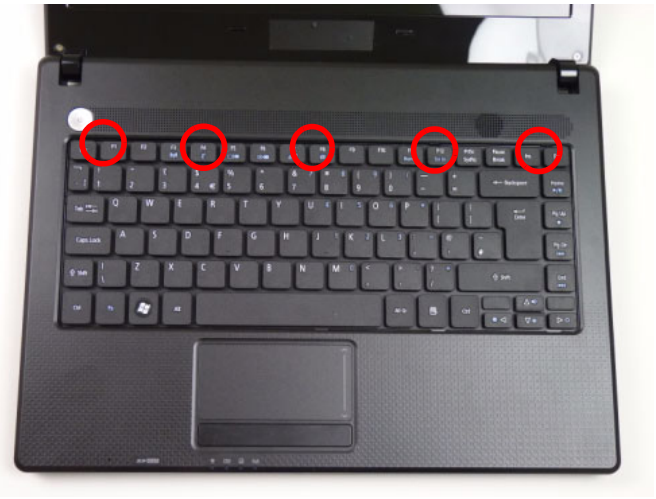
1. See “Removing the Battery Pack” on page 49.
2. Push the SD dummy card all the way in to eject it.

3. Pull it out from the slot.

Downloaded from www.Manualslib.com manuals search engine

# Removing the Keyboard

1. See “Removing the Battery Pack” on page 49.
2. Turn the computer over and fully open the lid. There are five (5) securing clips that must be released in order to remove the keyboard.

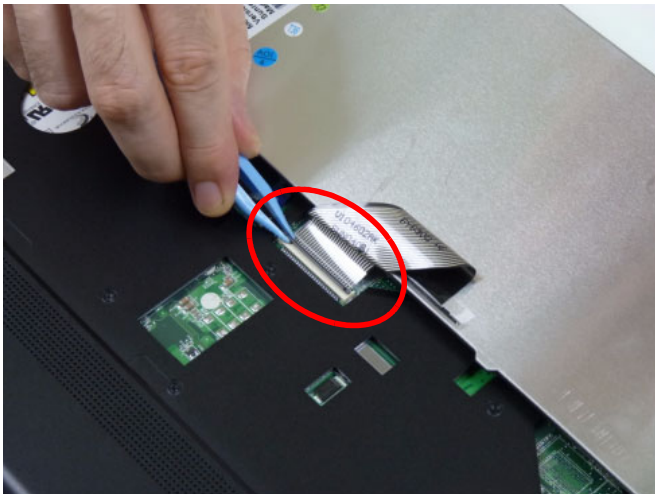


3. Release each clip, working from one side to the other.

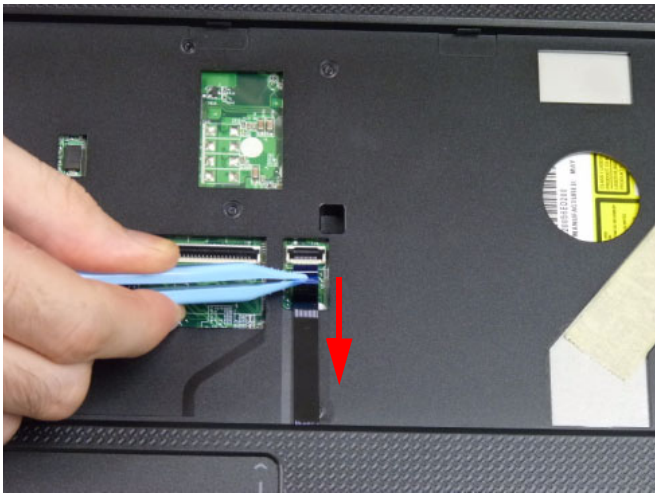
4. Using both hands, gently pry up the keyboard as shown and turn it over onto the palm rest.

Downloaded from www.Manualslib.com manuals search engine

5. Unlock the keyboard FPC and disconnect the cable as shown. Lift the keyboard clear of the chassis.



6. Unlock and disconnect the Touchpad FPC from the mainboard:

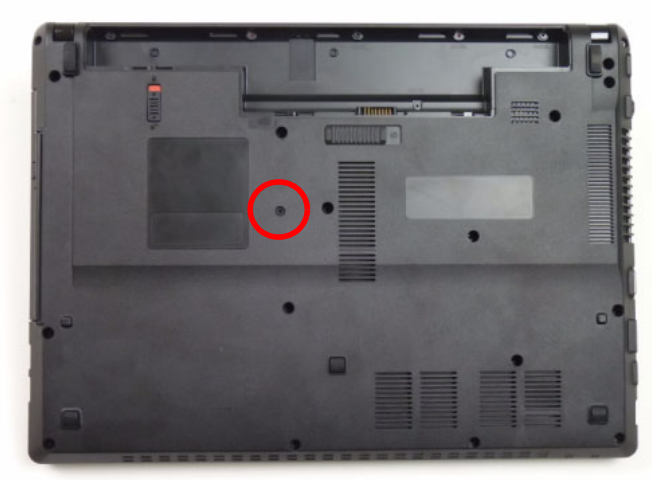




Downloaded from www.Manualslib.com manuals search engine

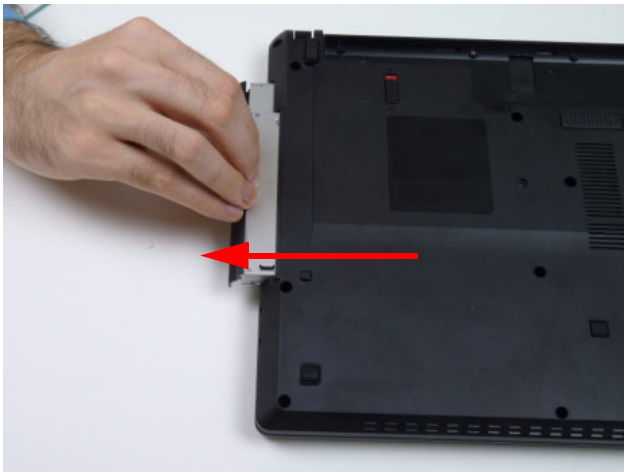
# Removing the ODD Module

1. See “Removing the Battery Pack” on page 49.
2. Remove the one (1) screw securing the ODD module in place.



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| ODD Bracket Disassembly | M2.5*6.5-I | 1 | |

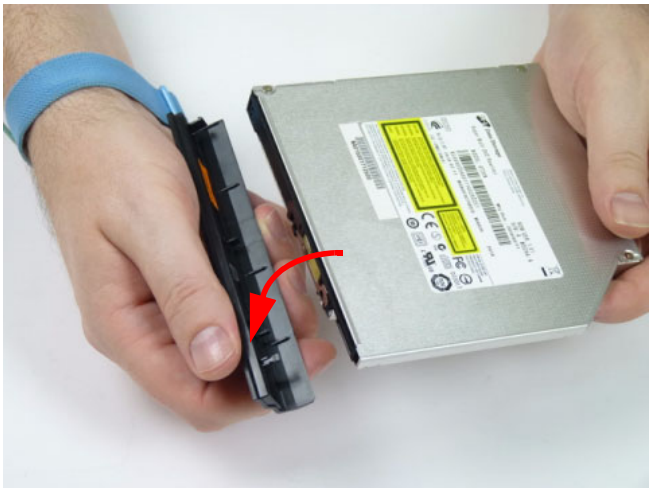
3. Grasp the ODD by the bezel and slide it out of the chassis.





Downloaded from www.Manualslib.com manuals search engine

4. Remove the ODD bezel by rotating the top edge downward.



5. Remove the two screws securing the ODD bracket.

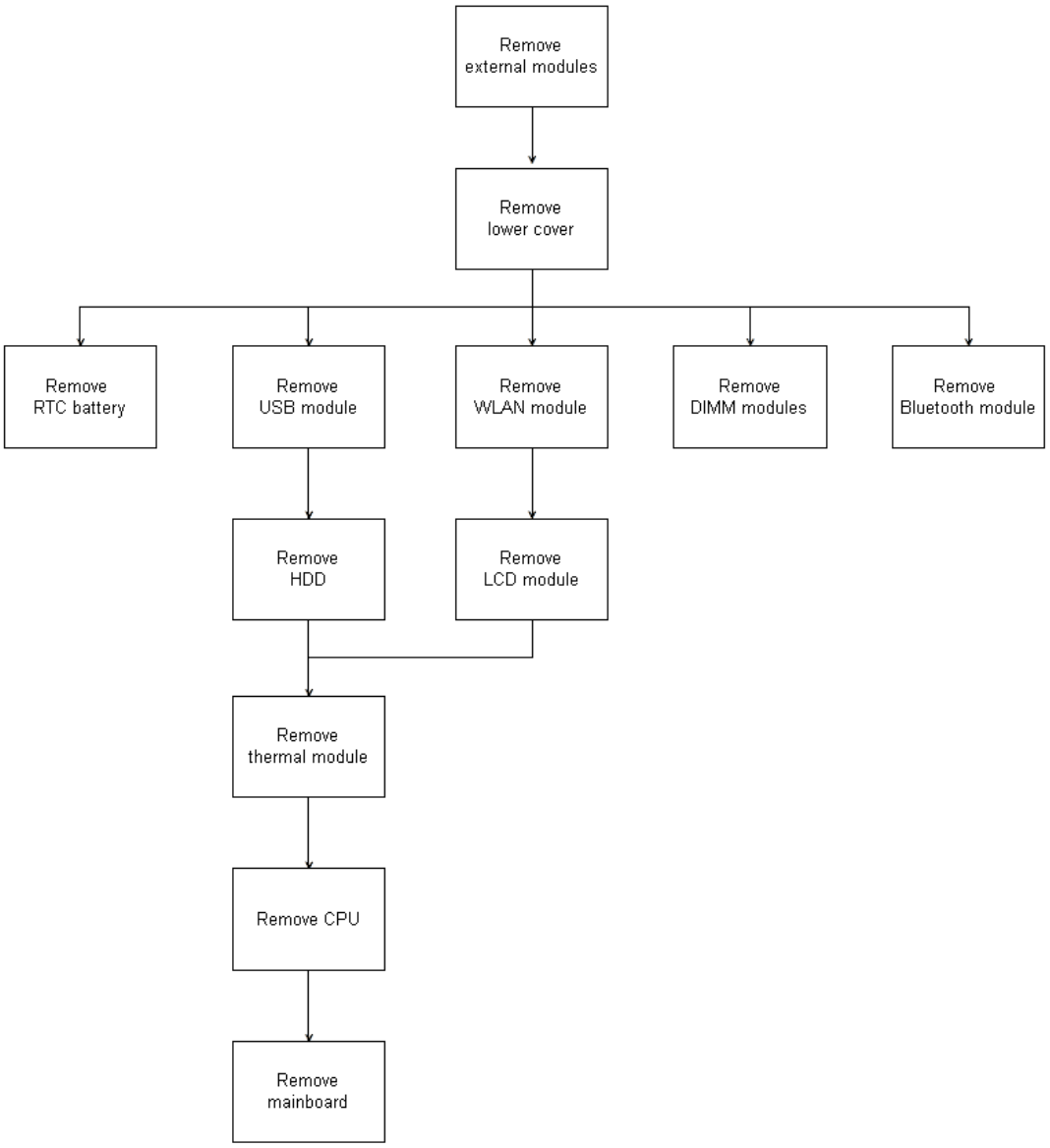
| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| ODD Bracket Disassembly | M2.0*3.0-I | 2 | |

6. Remove the bracket from the ODD.

Downloaded from www.Manualslib.com manuals search engine

# Main Unit Disassembly Process

## Main Unit Disassembly Flowchart




**Screw List**

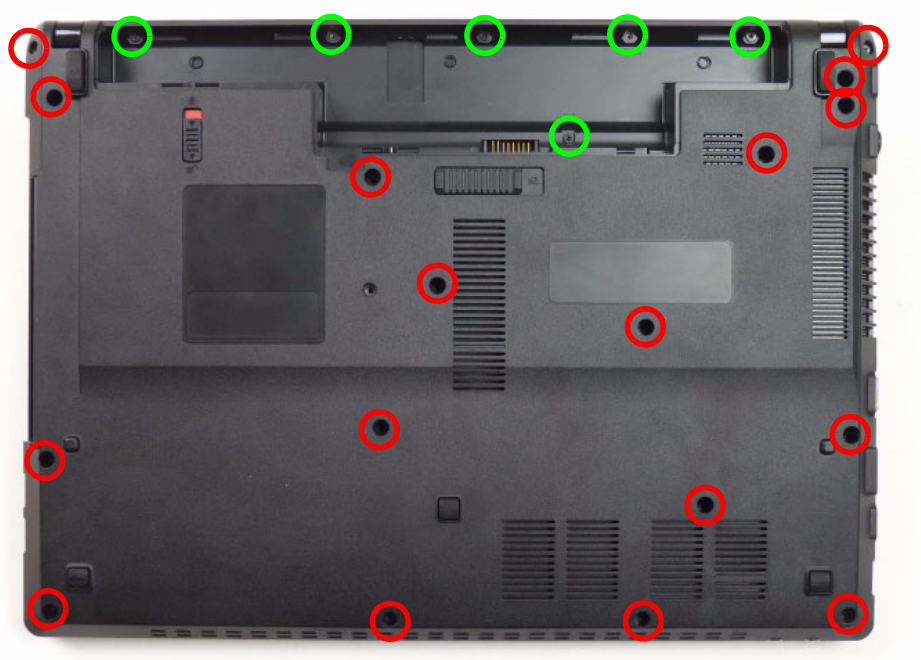
| Step | Screw | Quantity | Part No. |
|---|---|---|---|
| LCD Module | M2.5*6.5-I | 4 | 86.ARE07.001 |
| Lower Cover Disassembly | M2.5*6.5-I | 17 | 86.ARE07.001 |
| | M2.0*3.0-I | 6 | 86.ARE07.002 |
| USB Board Disassembly | M2.5*4.0-I | 1 | 86.R6Z07.001 |
| HDD Module Disassembly | M2-0.4*2-I | 1 | 86.W4107.002 |
| HDD Bracket | M3.0X3.5 | 4 | 86.N1407.007 |
| WLAN Module Disassembly | M2.0*3.0-I | 1 | 86.ARE07.002 |
| Mainboard Disassembly | M2.5*4.0-I | 1 | 86.R6Z07.001 |
| Thermal Module Disassembly | M2.5*4.0-I | 1 | 86.R6Z07.001 |



Downloaded from www.Manualslib.com manuals search engine

# Removing the Lower Cover

1. See “External Modules Disassembly Process” on page 48.
2. Remove the twenty three (23) securing screws from the lower cover.

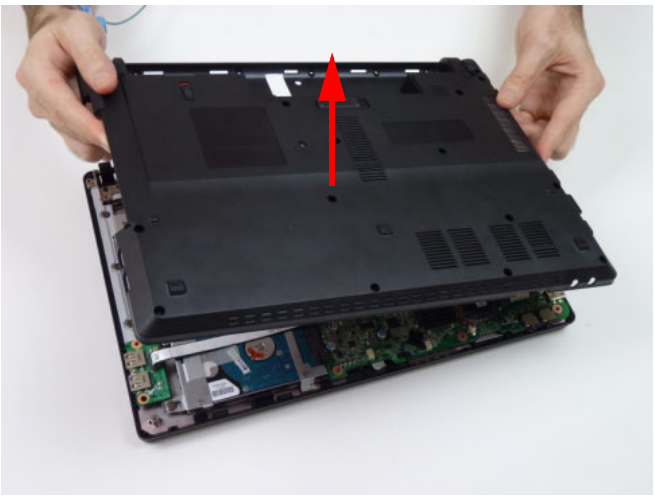


| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| Lower Cover (red callout) | M2.5*6.5-I | 17 | |
| Battery Bay (green callout) | M2.0*3.0-I | 6 | |



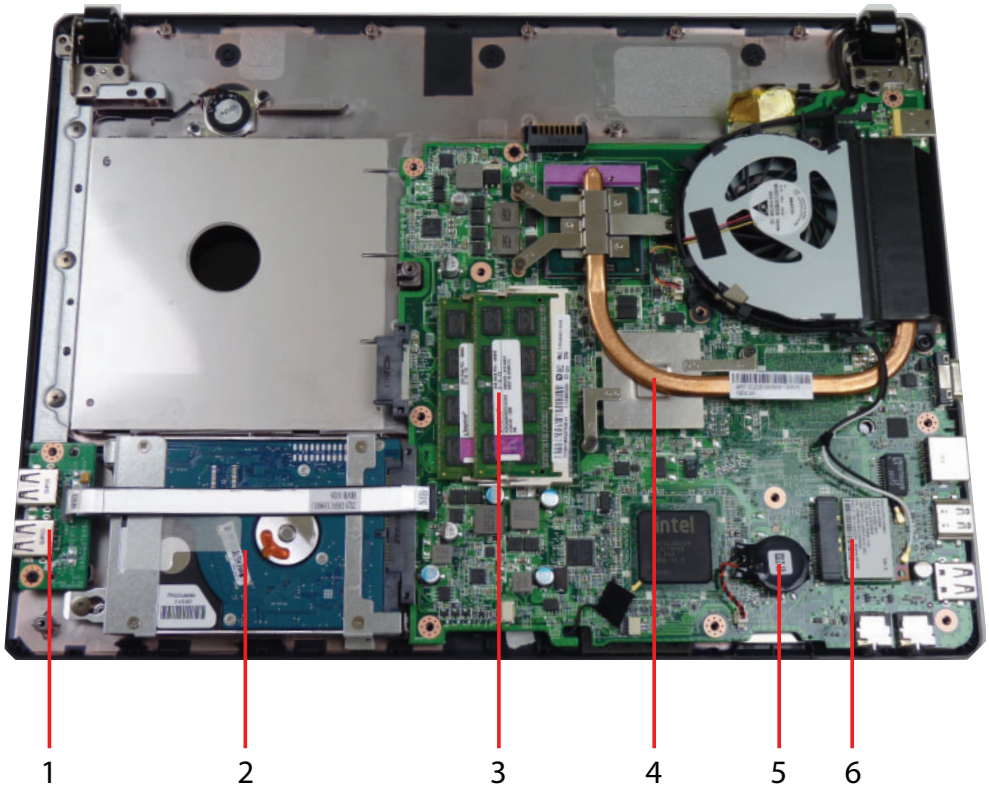
Downloaded from www.Manualslib.com manuals search engine

3. Grasp the ODD bay and the other hand on the other edge of the lower cover. Lift the lower cover from the device.



# Component Overview

Main components are assembled on the mainboard as illustrated in the following graphic.



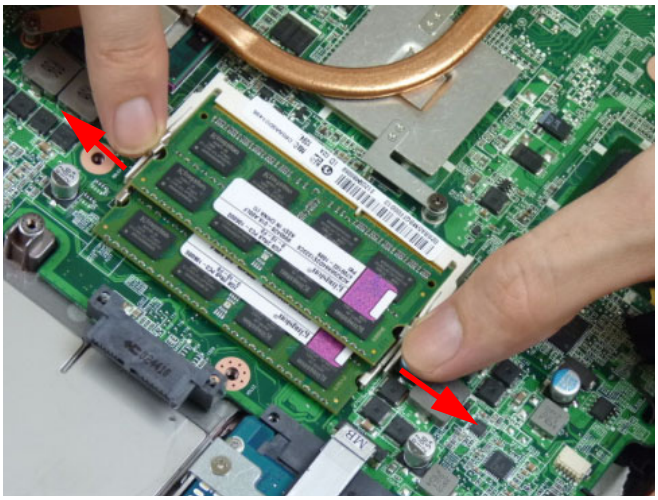

| Item | Description | Item | Description |
|---|---|---|---|
| 1 | USB board | 2 | HDD |
| 3 | DIMM modules | 4 | Heatsink |
| 5 | RTC battery | 6 | WLAN module |



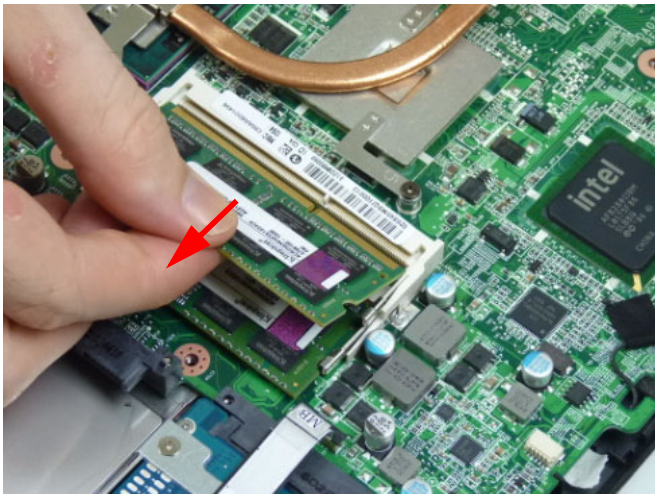
Downloaded from www.Manualslib.com manuals search engine

# Removing the DIMM Modules

1. See “Removing the Lower Cover” on page 56.
2. Push out the release latches on both sides of the DIMM socket to release the DIMM module.



3. Remove the DIMM module.



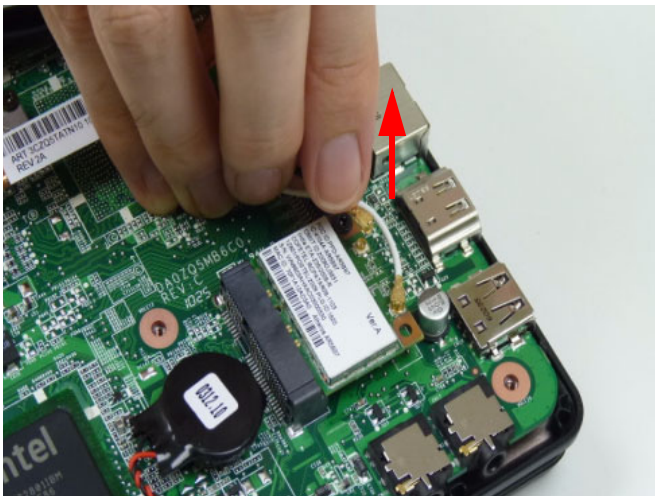

4. Repeat steps for the second DIMM module if present.



Downloaded from www.Manualslib.com manuals search engine

# Removing the WLAN Module

1. See “Removing the Lower Cover” on page 56.
2. Disconnect the two (2) cables from the WLAN board.



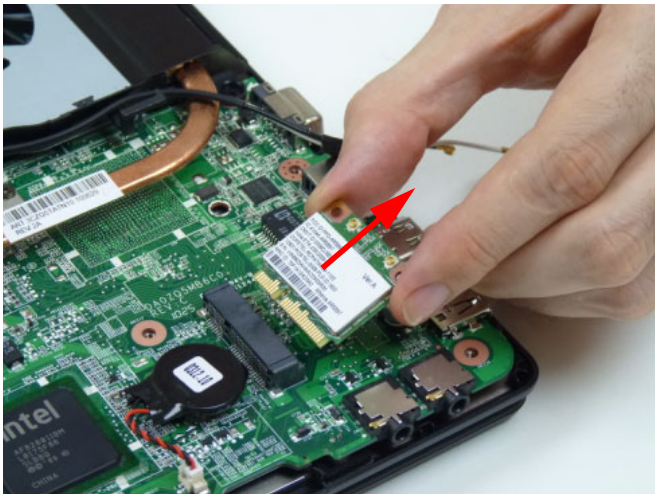
3. Remove the one (1) screw.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| WLAN Board Disassembly | M2.0*3.0-I | 1 | |



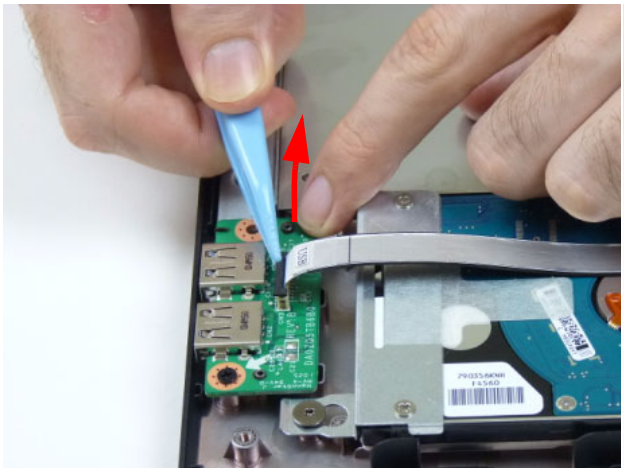
Downloaded from www.Manualslib.com manuals search engine

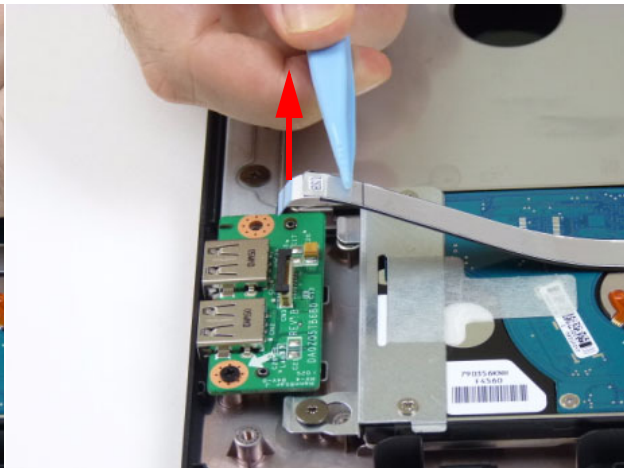
4. Detach and remove the WLAN board from the WLAN socket.



## Removing the USB Board

1. See “Removing the Lower Cover” on page 56.
2. Unlock and disconnect the USB FFC from the USB board. Repeat for the mainboard connector.





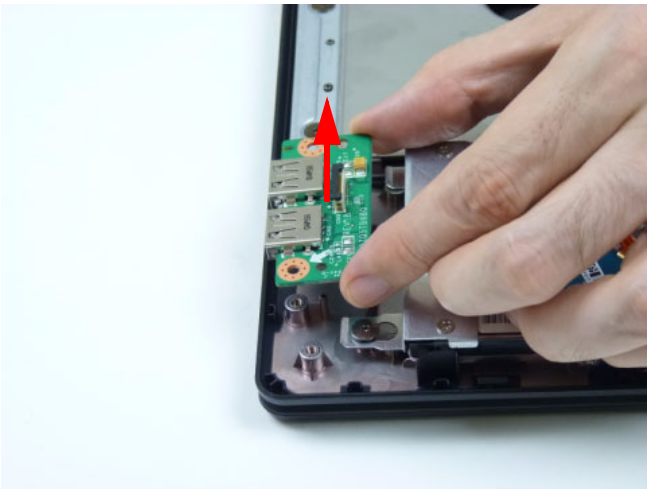


Downloaded from www.Manualslib.com manuals search engine

3. Remove the one (1) screw from the USB board.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| USB Board Disassembly | M2.5*4.0-I | 1 | |

4. Lift the USB board upward and away from the chassis.

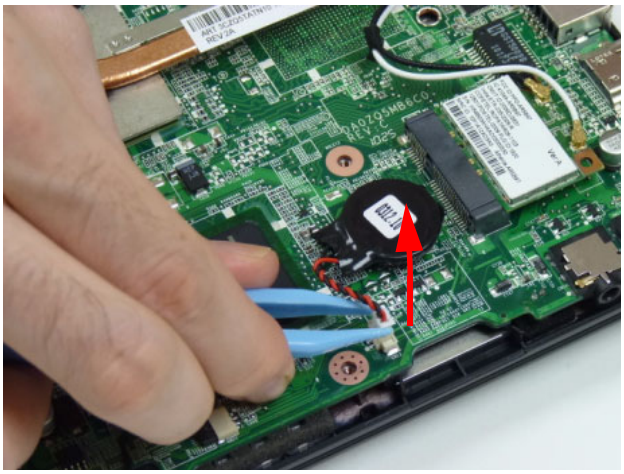




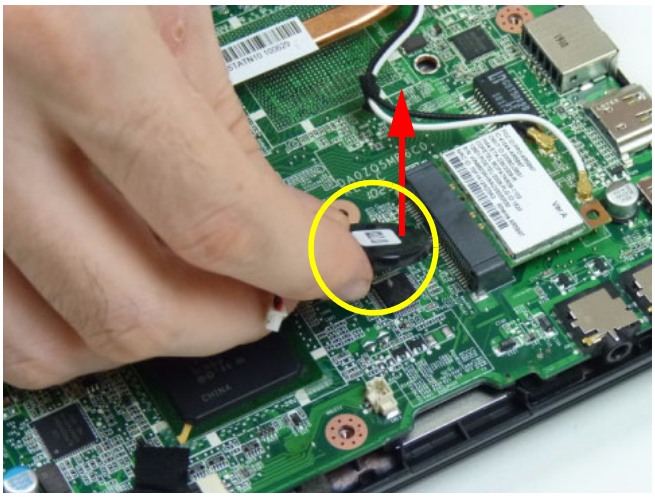
Downloaded from www.Manualslib.com manuals search engine

# Removing the RTC Battery

1. See “Removing the Lower Cover” on page 56.
2. Disconnect the RTC battery cable from the mainboard.



3. Lift the RTC battery away from the mainboard.



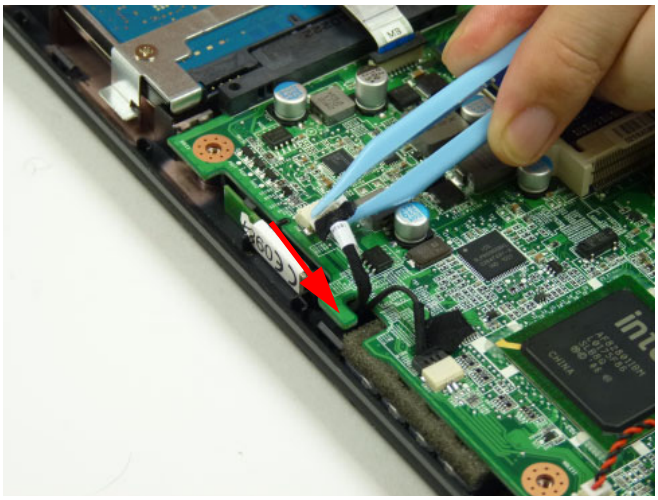
**NOTE: The RTC battery has been highlighted with a yellow callout in the previous image. Please detach the RTC battery and follow local regulations for disposal.**



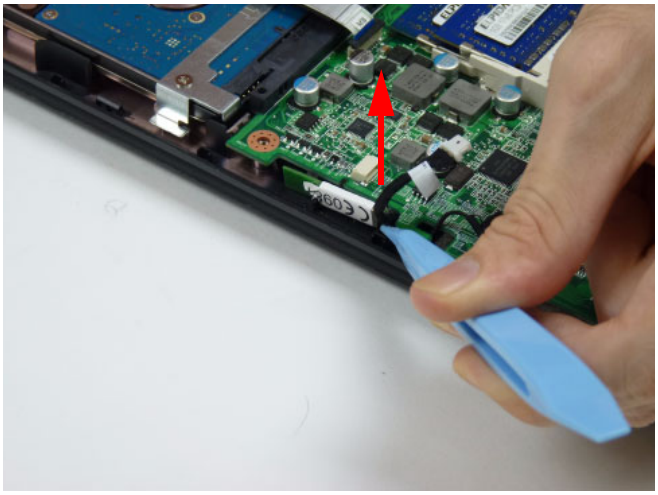
Downloaded from www.Manualslib.com manuals search engine

# Removing the Bluetooth Module

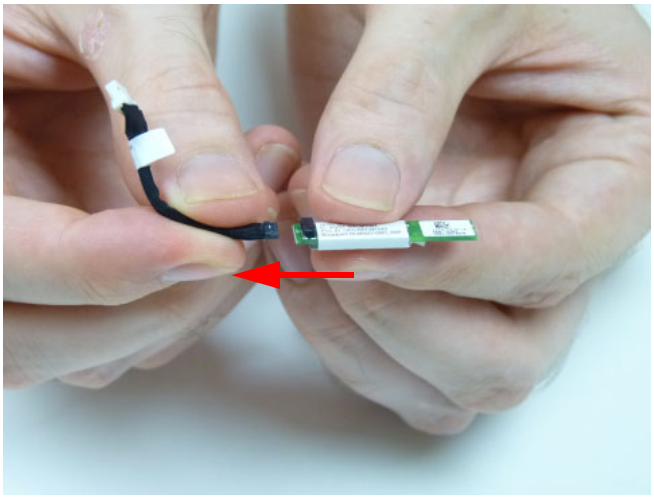
1. See “Removing the Lower Cover” on page 56.
2. Disconnect the Bluetooth cable from the mainboard.



3. Gently pry the Bluetooth module upwards and away from the mainboard.



4. Disconnect the Bluetooth cable from the Bluetooth module.





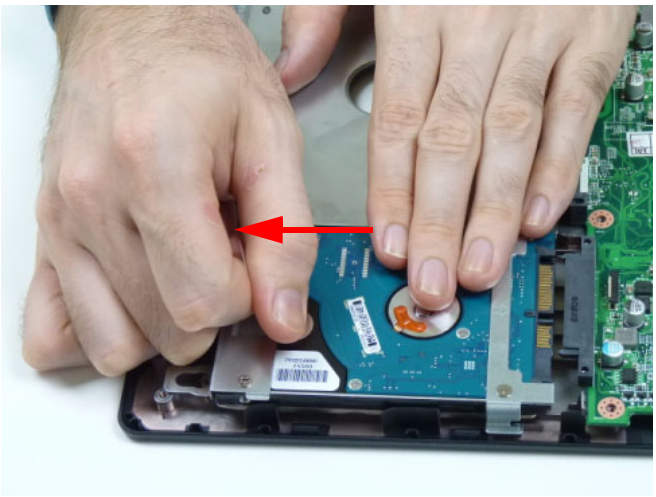
Downloaded from www.Manualslib.com manuals search engine

# Removing the HDD Module

1. See “Removing the USB Board” on page 60.
2. Remove the one (1) screw securing the HDD module to the mainboard.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| HDD Module | M2-0.4*2-I | 2 | |

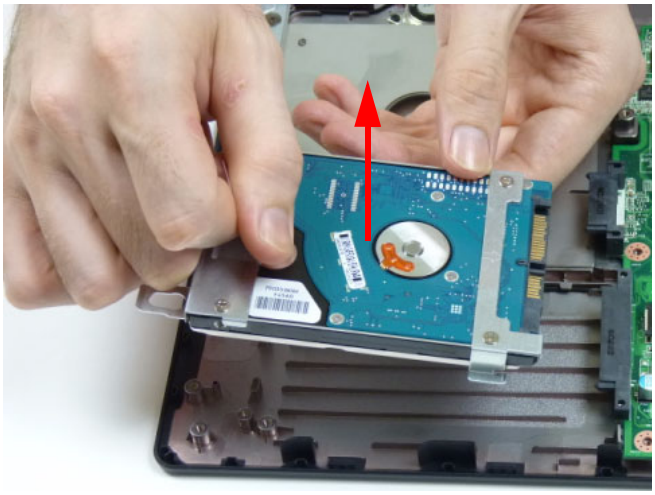
3. Using the pull-tab, slide the HDD module in the direction of the arrow to disconnect the interface.



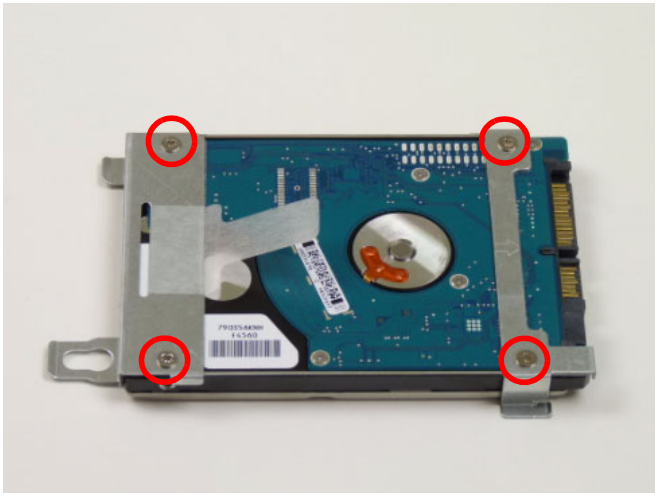


Downloaded from www.Manualslib.com manuals search engine

4. Remove HDD from the bay.

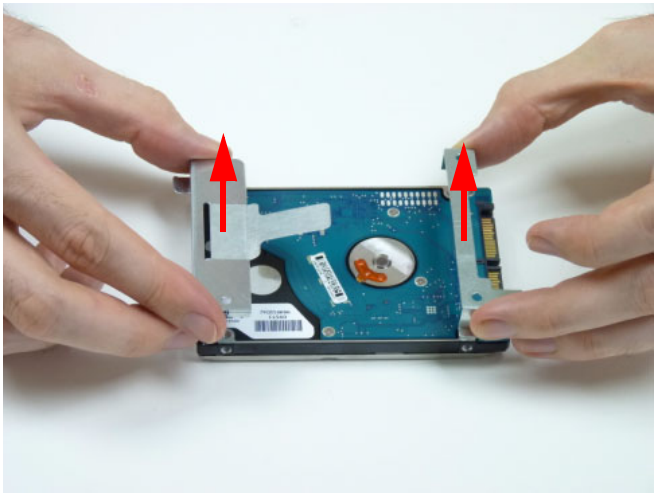


5. Remove the four (4) screws from the carrier.



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| HDD Carrier Disassembly | M3.0*3.5-NIH | 4 | |

6. Remove the carrier from the HDD.

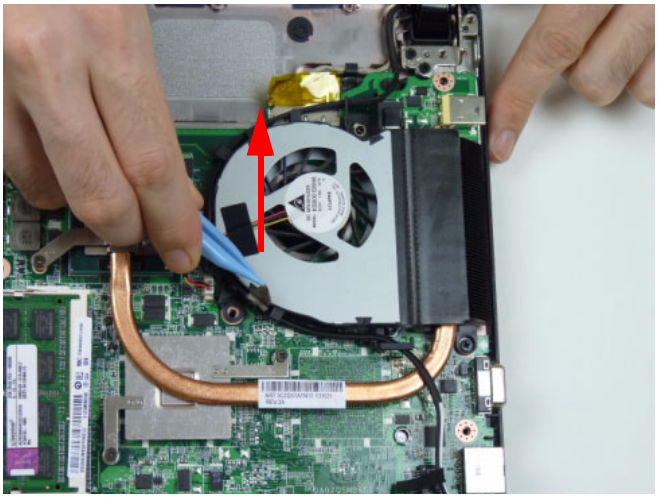




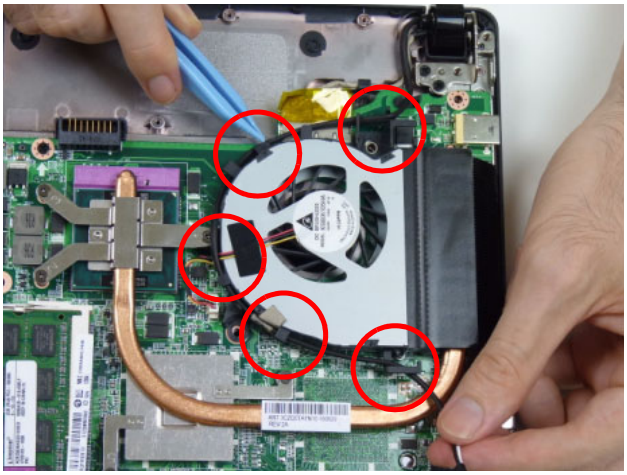
Downloaded from www.Manualslib.com manuals search engine

# Removing the LCD Module

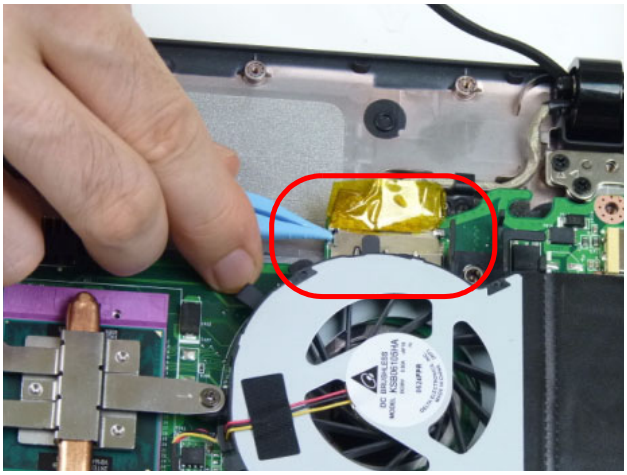
1. See “Removing the WLAN Module” on page 59.
2. Remove the adhesive ground wire from the fan housing.



3. Remove the WLAN antennas from the cable guides.



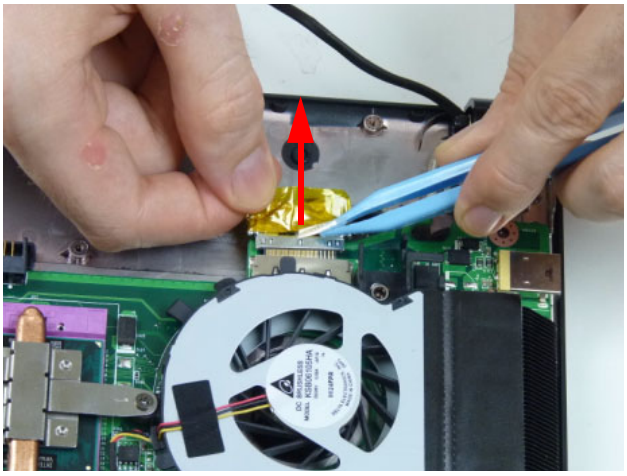
4. Unlock the LVDS cable.



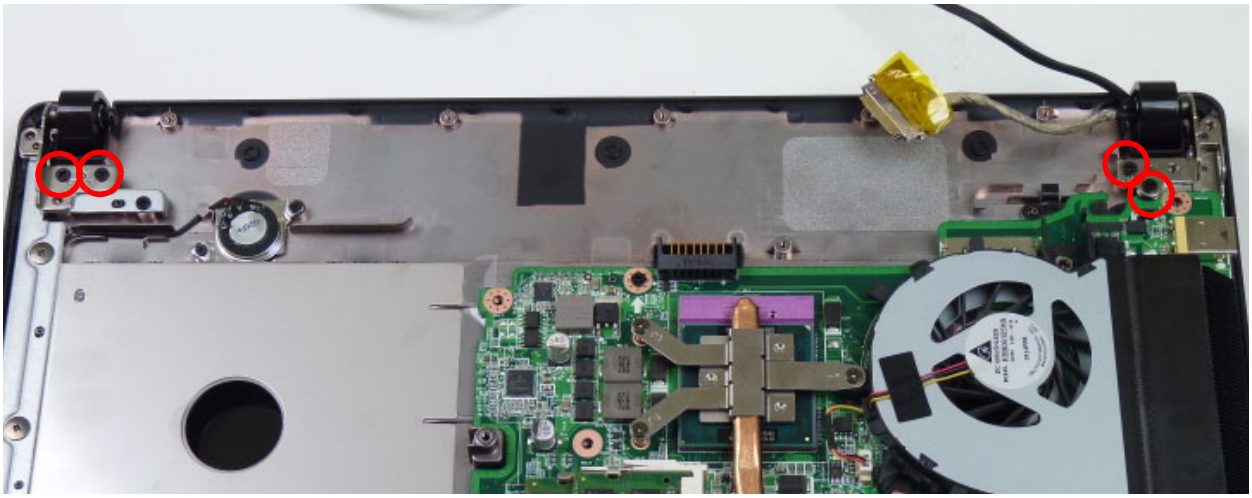


Downloaded from www.Manualslib.com manuals search engine

5. Disconnect the LVDS cable.

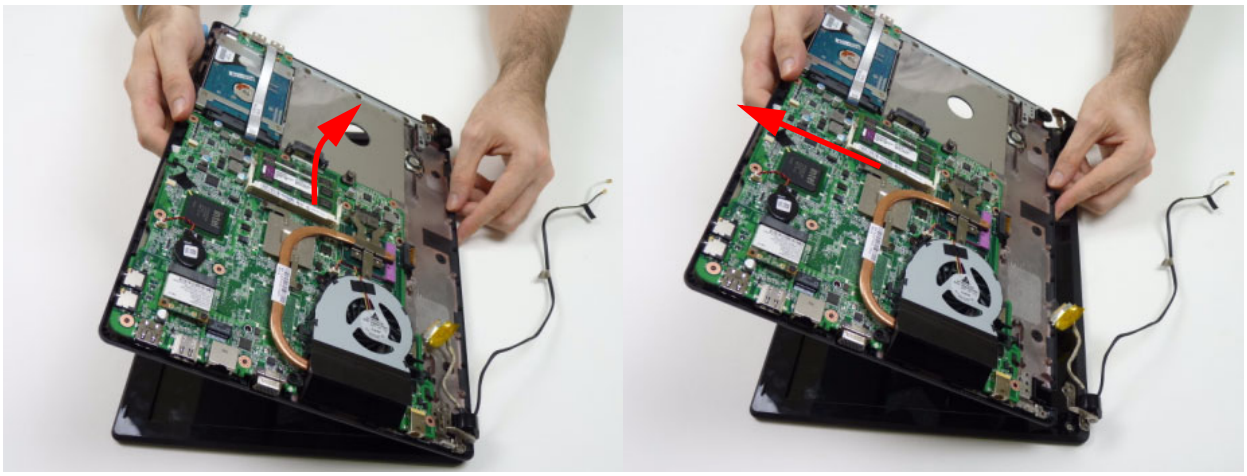


6. Remove the four (4) screws from the left and right hinges.



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Module Disassembly | M2.5*6.5-I | 4 | |

7. Tilt the upper cover upwards slightly and separate it from the LCD module.

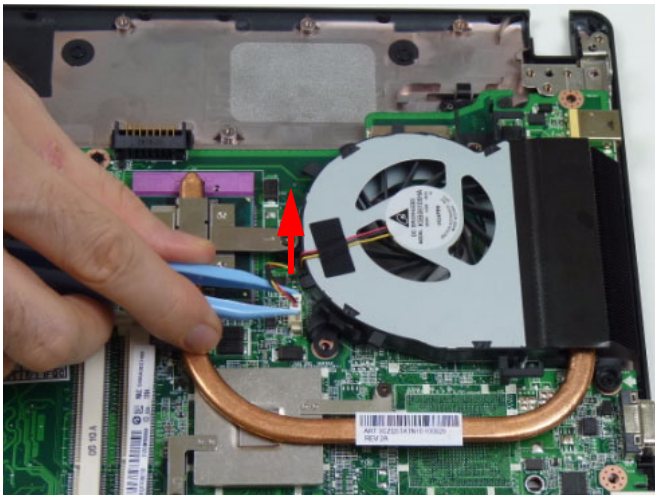




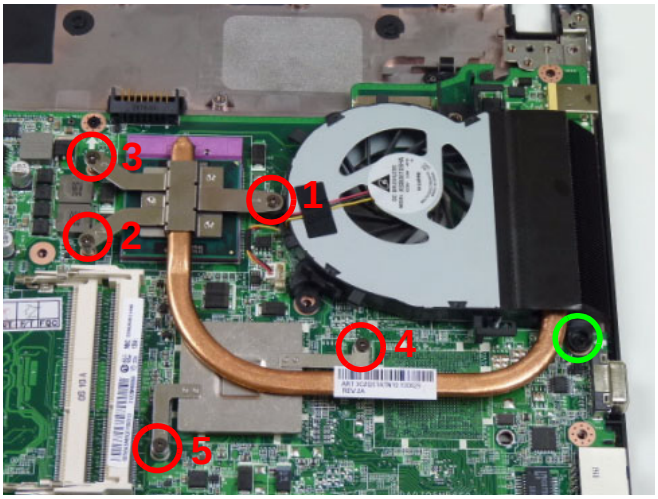
Downloaded from www.Manualslib.com manuals search engine

# Removing the Thermal Module

1. See “Removing the LCD Module” on page 66.
2. Disconnect the fan cable as shown.



3. Loosen the five (5) captive screws (in numerical order from 1 to 5) and remove the one screw from the fan module.




| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| Thermal Module Disassembly | M2.5*4.0-I (green callout) | 1 | |



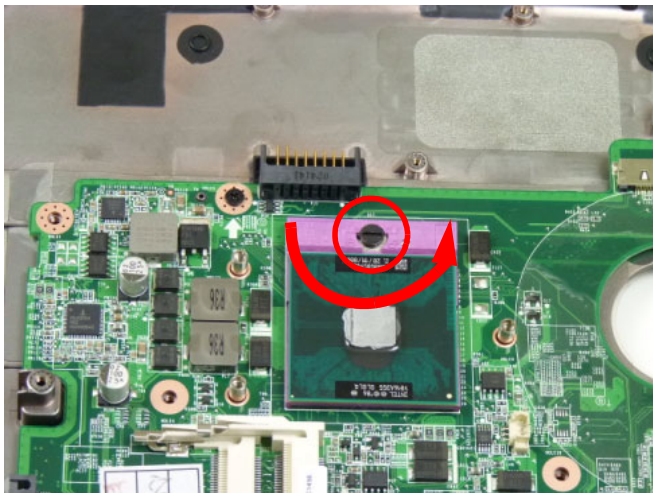
Downloaded from www.Manualslib.com manuals search engine

4. Carefully lift up the thermal module assembly and remove it from the mainboard.

**IMPORTANT:** Place the thermal module on a clean, dry surface when it is not installed.

## Removing the CPU

1. See “Removing the Thermal Module” on page 68.
2. Using a slotted screw driver, rotate the CPU locking screw 180° counter-clockwise as shown.

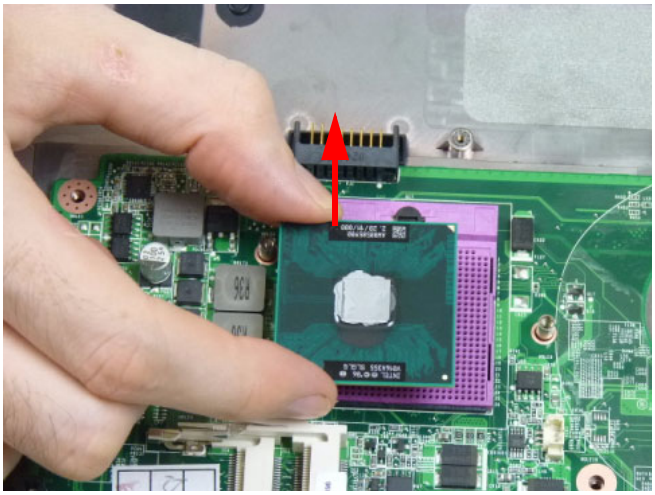




Downloaded from www.Manualslib.com manuals search engine

3. Carefully lift the CPU clear of the socket.

**IMPORTANT:**Place the CPU on a clean, dry surface when it is not installed.

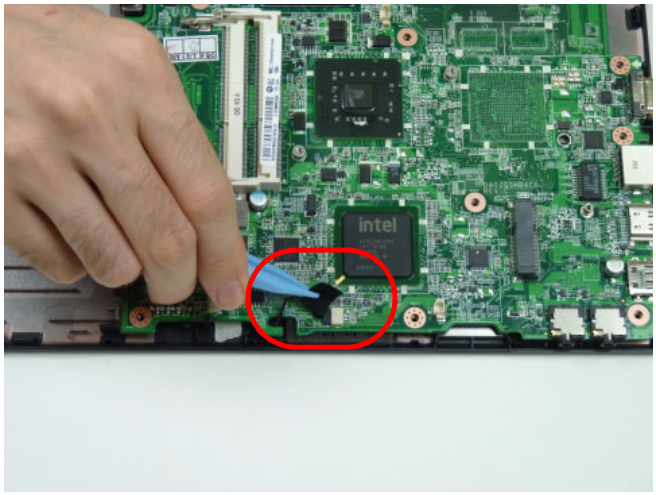




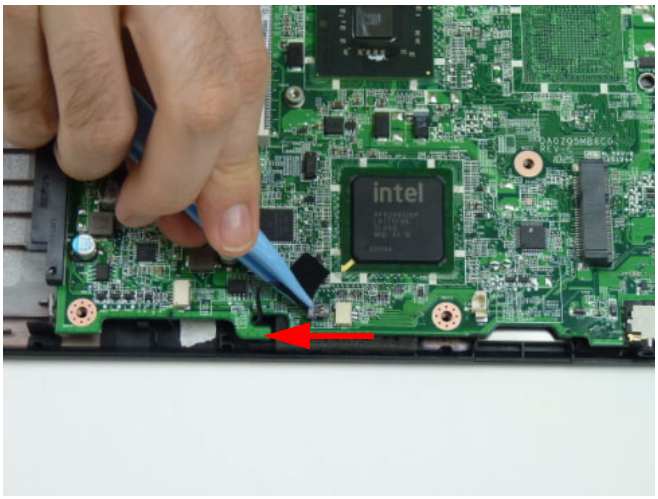
Downloaded from www.Manualslib.com manuals search engine

# Removing the Mainboard

1. See “Removing the CPU” on page 69.
2. Remove the adhesive tape securing the speaker cable to the mainboard.



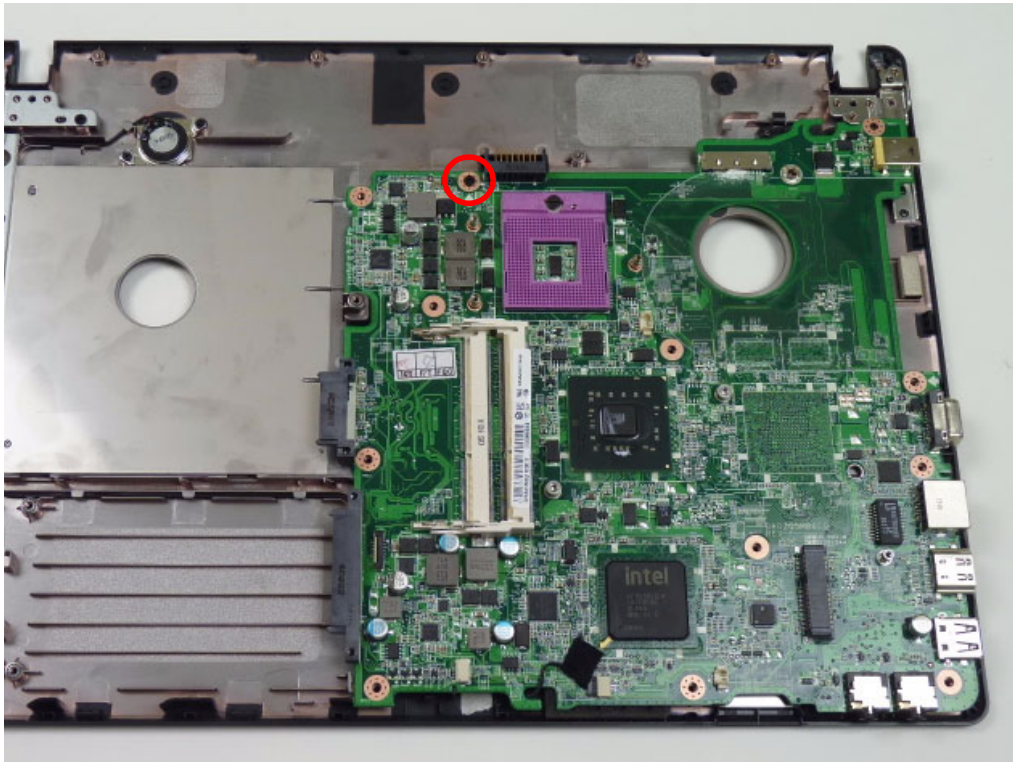
3. Disconnect the speaker cable from the mainboard connector.





Downloaded from www.Manualslib.com manuals search engine

**4.** Remove the one (1) securing screw from the mainboard.

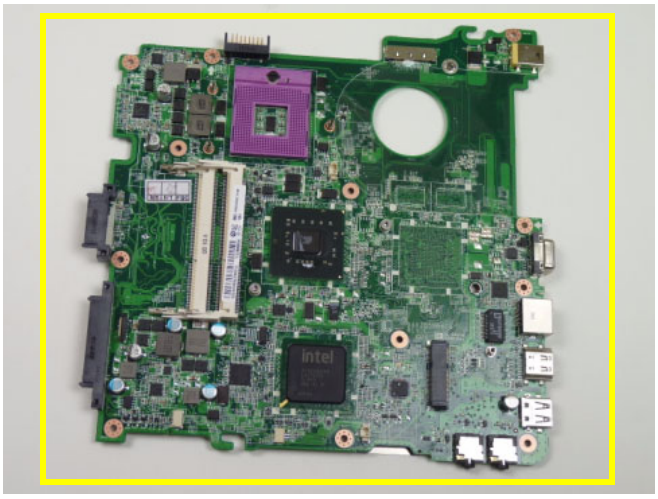


| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| Mainboard Disassembly | M2.5*4.0-I | 1 | |



Downloaded from www.Manualslib.com manuals search engine

5. Lift the mainboard away the lower cover.



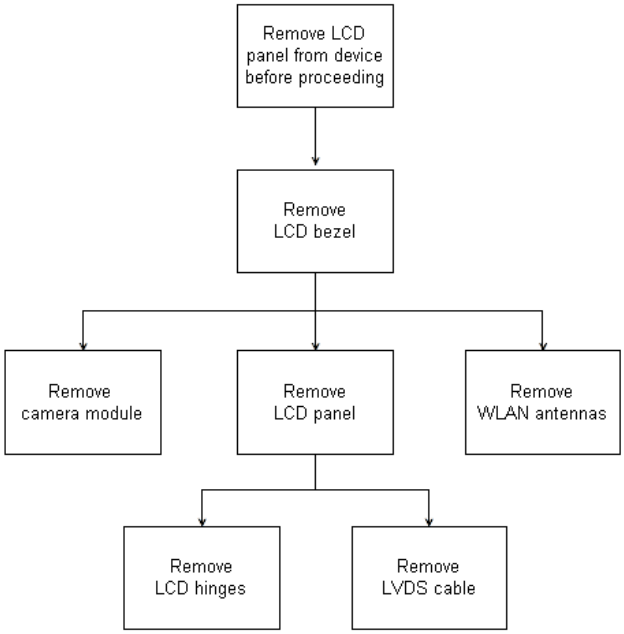
**NOTE: The mainboard has been highlighted with a yellow callout in the previous image. Please detach the mainboard and follow local regulations for disposal.**



Downloaded from www.Manualslib.com manuals search engine

# LCD Module Disassembly Process

## LCD Module Disassembly Flowchart




**Screw List**

| Step | Screw | Quantity | Part No. |
|---|---|---|---|
| LCD Bezel Disassembly | M2.5*5-I | 2 | 86.T23V7.010 |
| LCD Panel Disassembly | M2.0*3.0-I | 6 | 86.ARE07.002 |
| LCD Hinge Disassembly | M2.5*4.0-I | 6 | 86.R6Z07.001 |



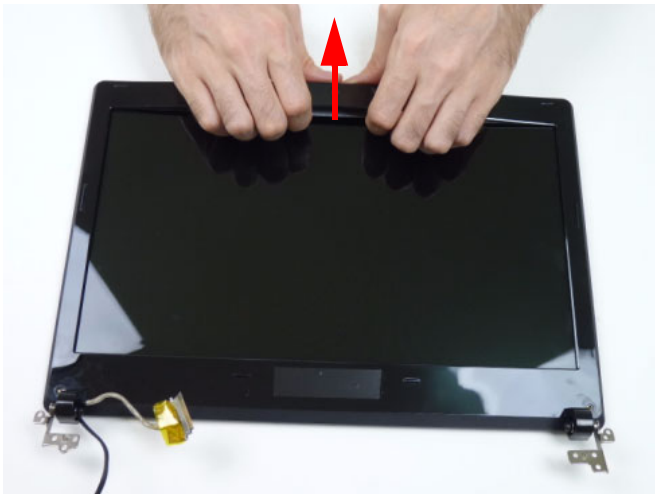
Downloaded from www.Manualslib.com manuals search engine

# Removing the LCD Bezel

1. See “Removing the LCD Module” on page 66.
2. Remove the two (2) bezel screws from the LCD module.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Bezel Disassembly | M2.5*5.0-I | 2 | |

3. Pry the bezel upwards at the top of the LCD module releasing it from the latches.

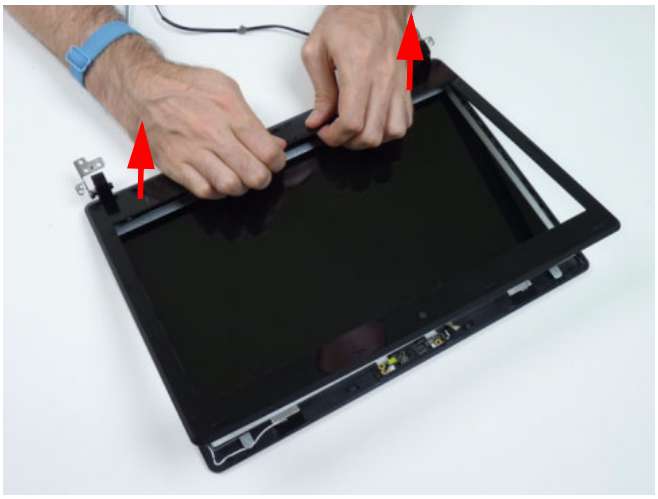




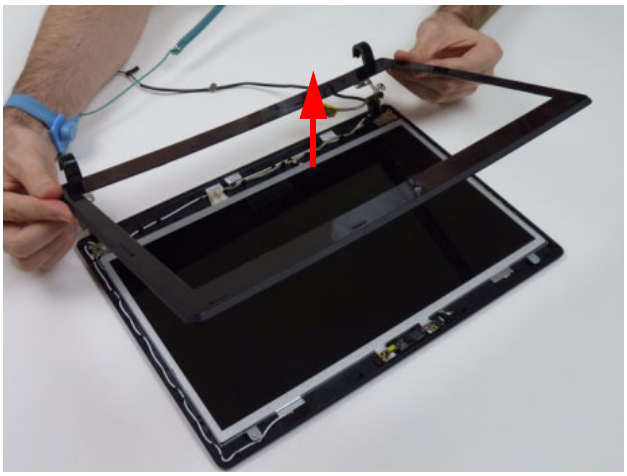
Downloaded from www.Manualslib.com manuals search engine

4. Continue separating the latches along the sides of the bezel towards the hinges.

5. Release the latches at the bottom of the LCD bezel.



6. Lift the Bezel clear of the LCD module.

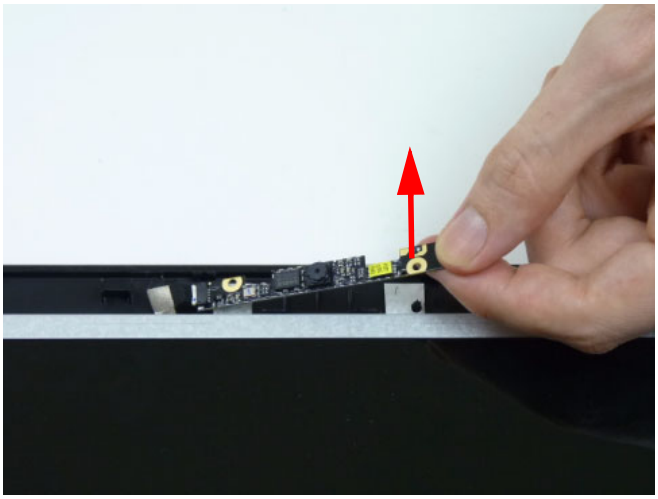




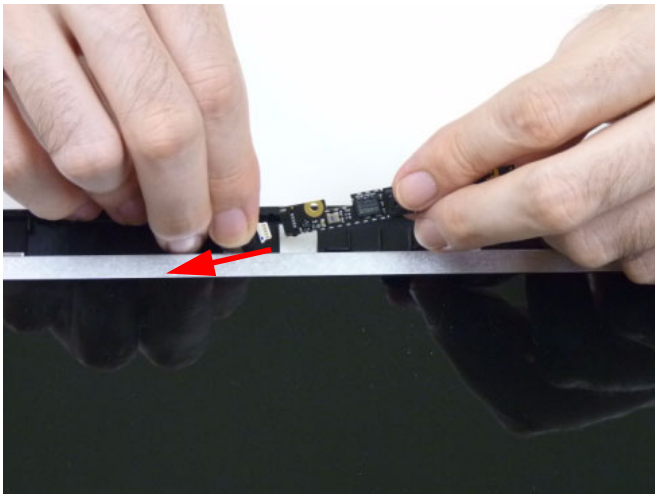
Downloaded from www.Manualslib.com manuals search engine

# Removing the Camera Module

1. See “Removing the LCD Bezel” on page 75.
2. Lift the camera module from the LCD cover.



3. Disconnect the cable as shown.



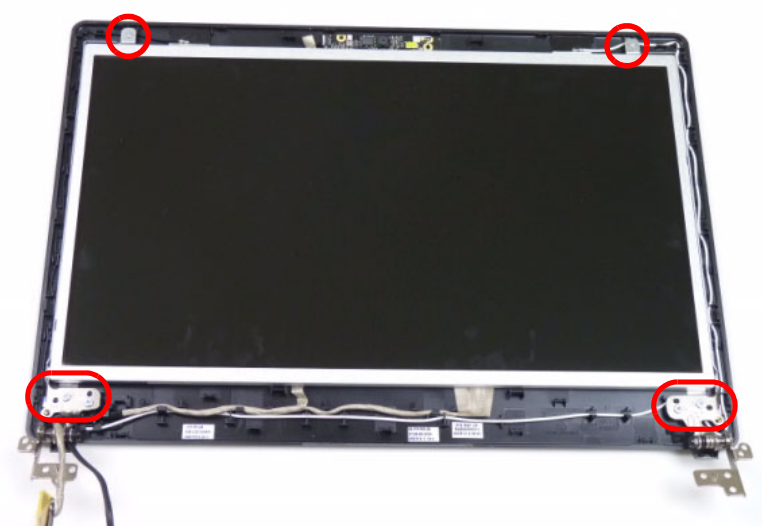
**NOTE:** Take care not to damage the cable.



Downloaded from www.Manualslib.com manuals search engine

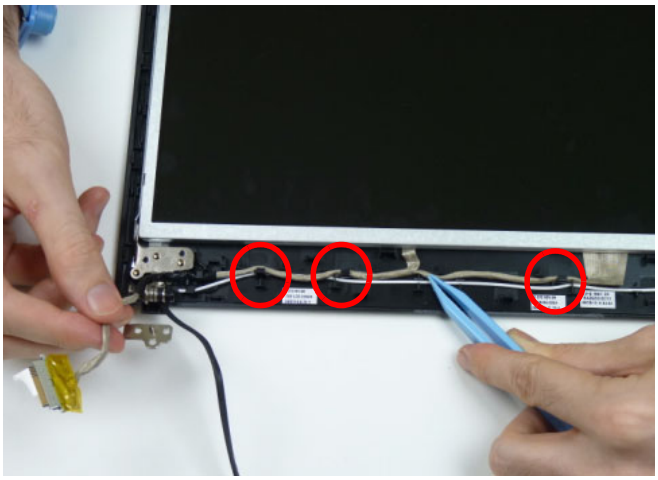
# Removing the LCD Panel

1. See “Removing the LCD Bezel” on page 75.
2. Remove the six (6) securing screws from the LCD panel.



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Panel Disassembly | M2.5*4.0-I | 6 | |

3. Remove the LVDS cable from the cable guides.



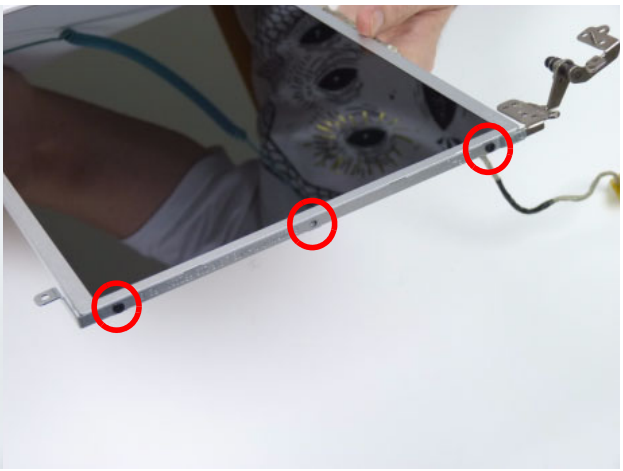


Downloaded from www.Manualslib.com manuals search engine

4. Lift the LCD panel clear of the LCD cover as shown.

## Remove the LCD Hinges

1. See “Removing the LCD Panel” on page 78.
2. Remove the six (6) screws, 3 on each side. Separate the hinges from the LCD panel.



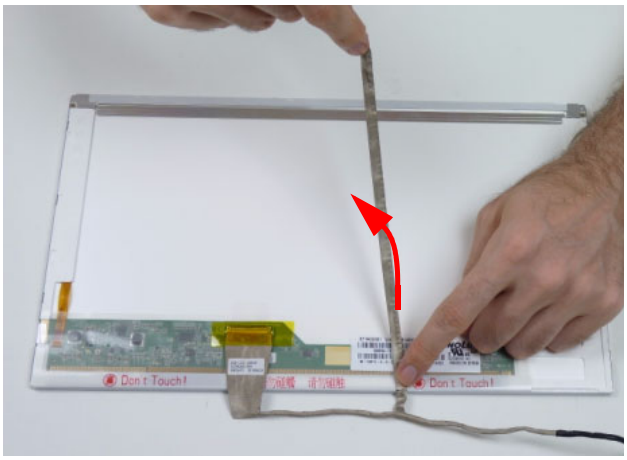
| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Hinge Disassembly | M2.0*3.0-I | 6 | |



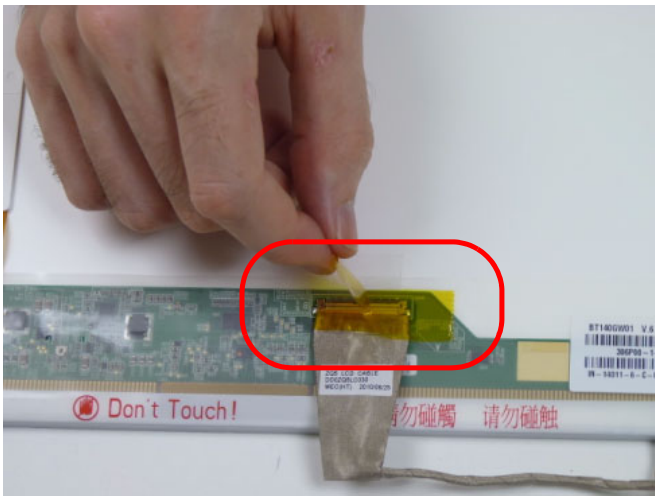
Downloaded from www.Manualslib.com manuals search engine

# Removing the LVDS Cable

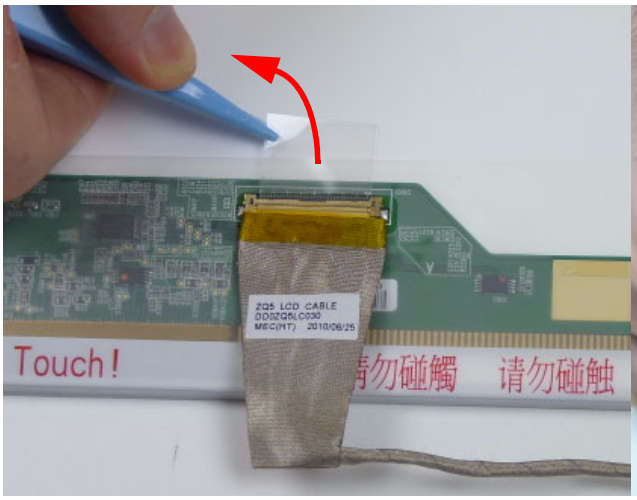
1. See “Removing the LCD Panel” on page 78.
2. Detach the camera cable from the back of the LCD panel.

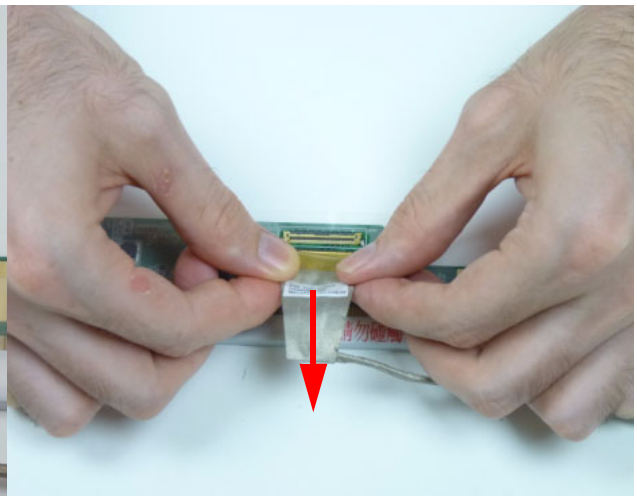


3. Remove the yellow tape securing the LVDS cable.




4. Starting from the top, remove the clear mylar covering and disconnect the LVDS cable from the LCD panel.



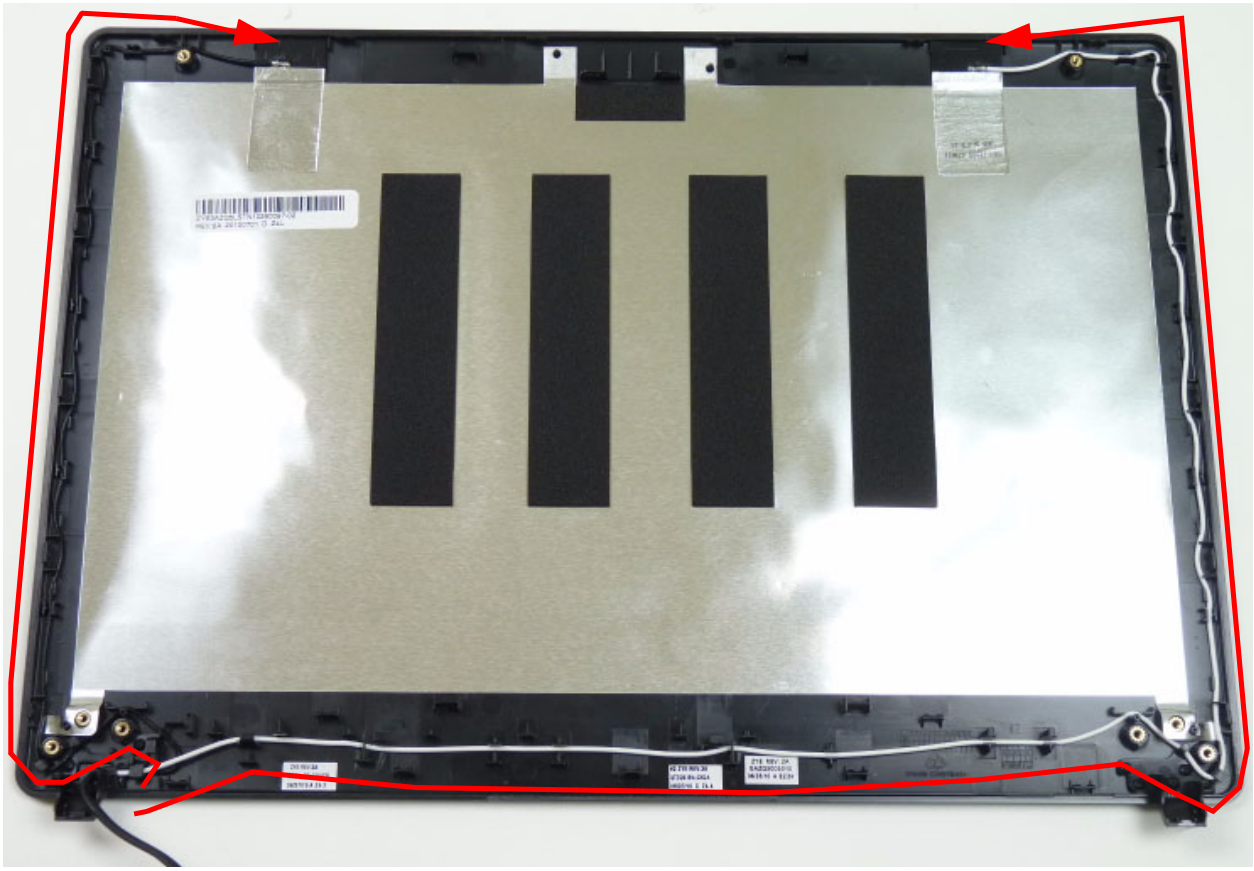





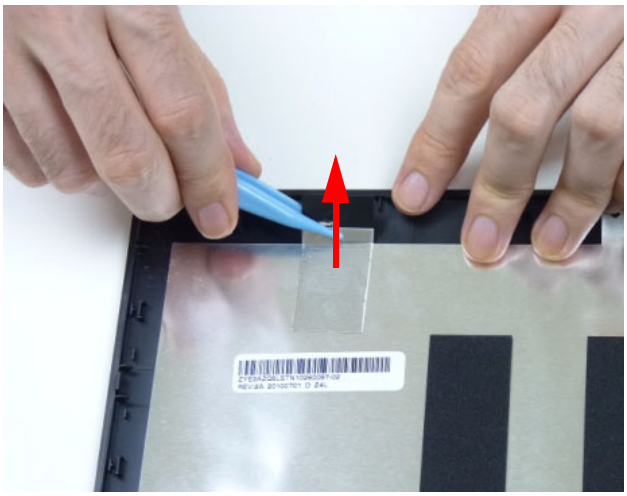
Downloaded from www.Manualslib.com manuals search engine

# Removing the WLAN Antennas

1. See “Removing the LCD Panel” on page 78.
2. Remove the black and white WLAN antennas from the cable guides.



3. Remove the black antenna cable from the LCD cover. Repeat for the white antenna.



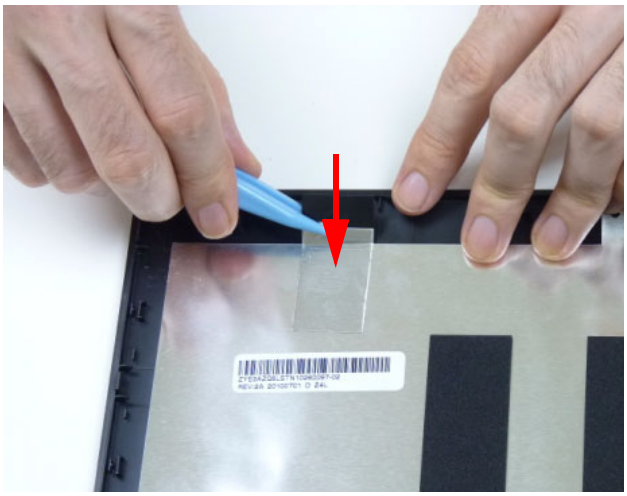


Downloaded from www.Manualslib.com manuals search engine

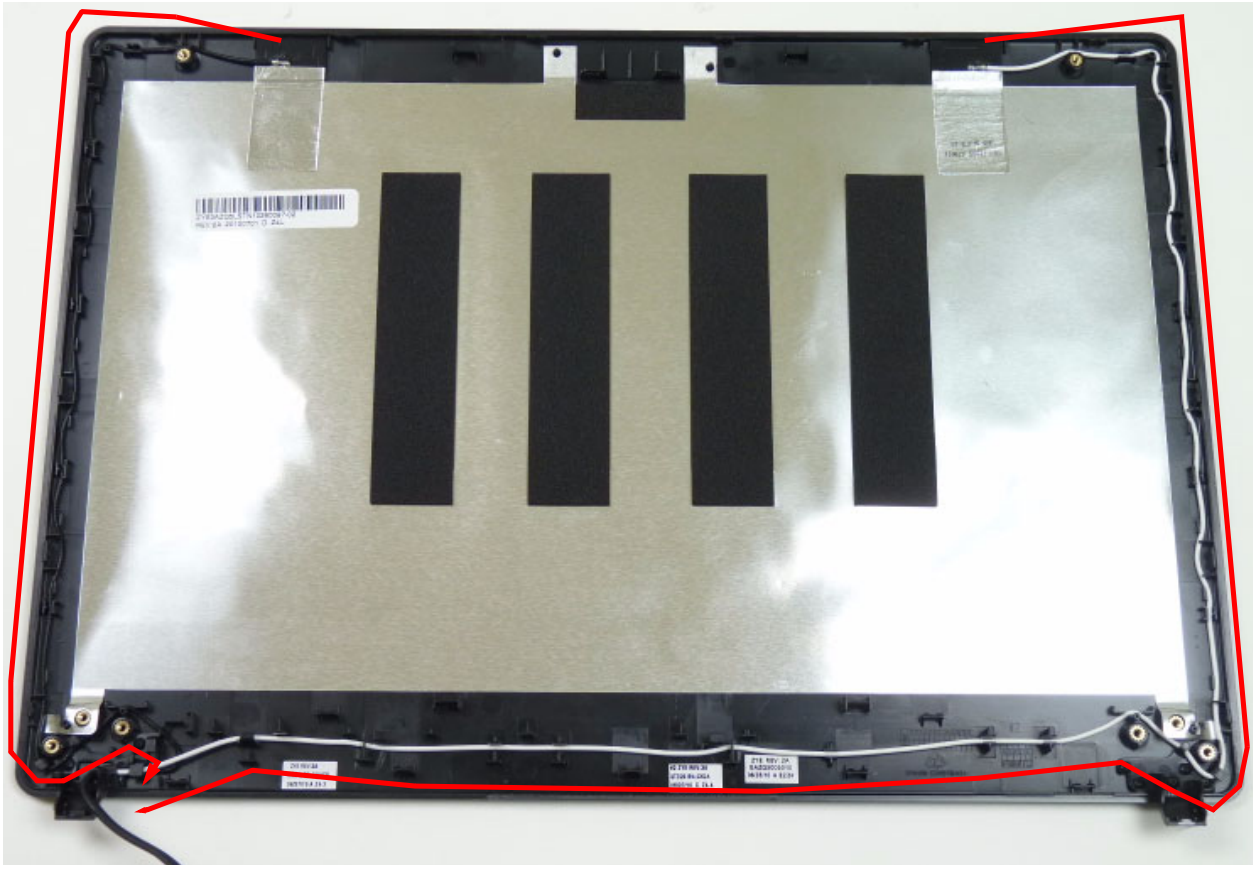
# LCD Module Assembly Process

## Replacing the WLAN Antennas

1. Place the black antenna cable onto the LCD cover as shown. Repeat for the white antenna.



2. Place the black and white WLAN antennas into the cable guides as shown.

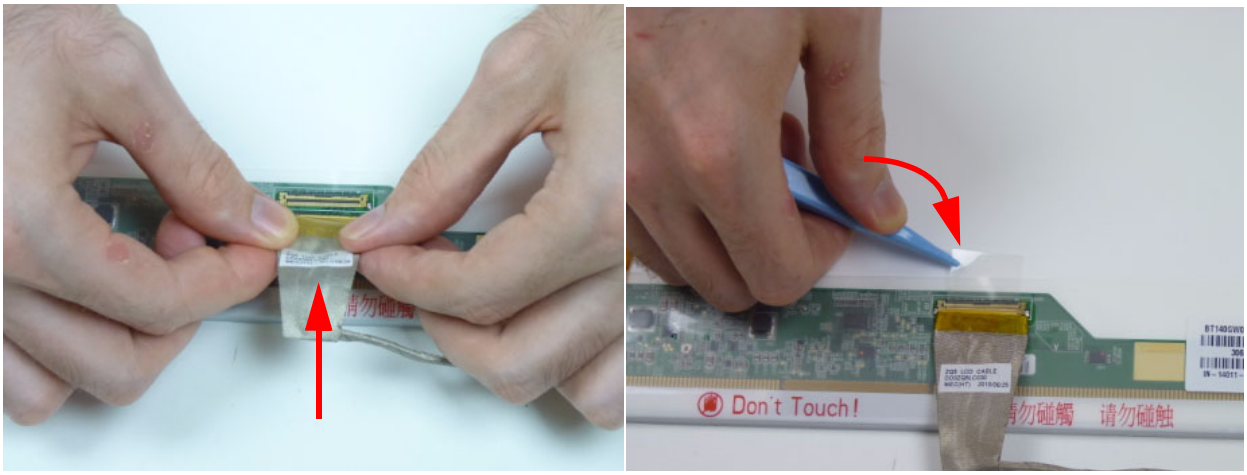




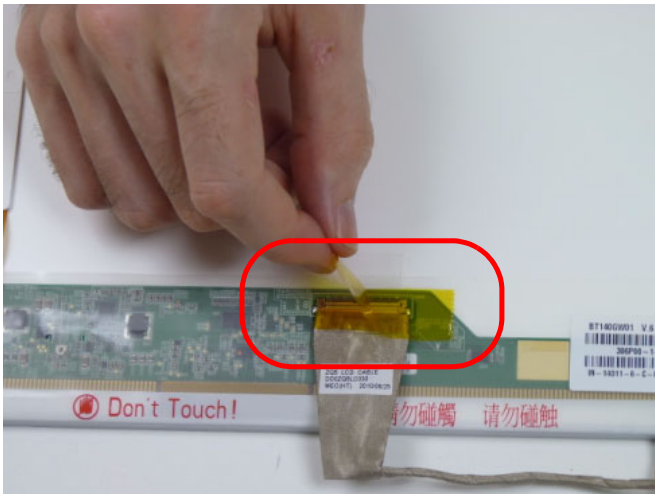
Downloaded from www.Manualslib.com manuals search engine

# Replacing the LVDS Cable

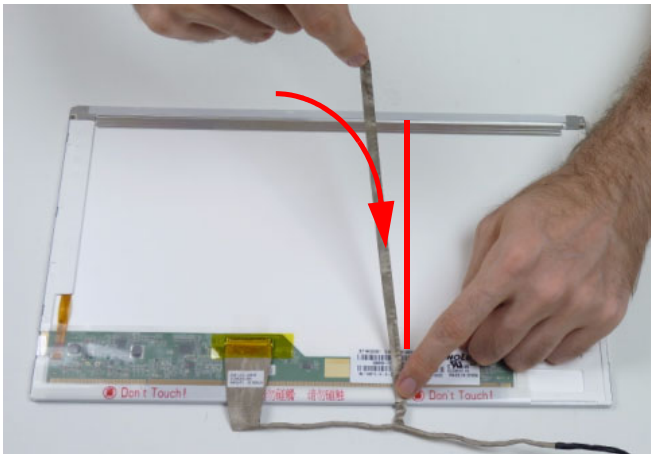
1. Turn the LCD panel face down on a non-abrasive, clean surface. Ensure the panel face does not get damaged. Connect the LVDS cable to the LCD panel. Place the clear mylar tape over the connector and press firmly.




2. Replace the yellow adhesive tape to secure the LVDS cable.




3. Adhere the camera cable to the LCD panel.



**NOTE:** Ensure the camera cable is placed as shown to prevent damage to the camera.



Downloaded from www.Manualslib.com manuals search engine

# Replacing the LCD Hinges

1. See “Removing the LCD Panel” on page 78.
2. Replace the six (6) screws, 3 on each side to secure the hinges.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Hinge Disassembly | M2.0*3.0-I | 6 | |

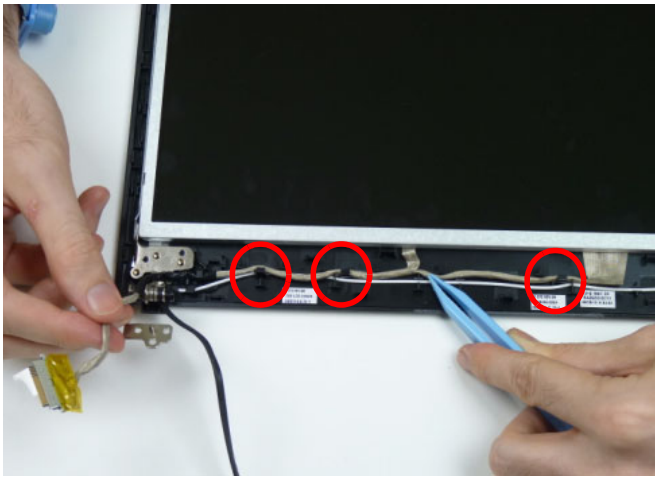


Downloaded from www.Manualslib.com manuals search engine

# Removing the LCD Panel

1. Place the LCD panel on the LCD cover as shown.

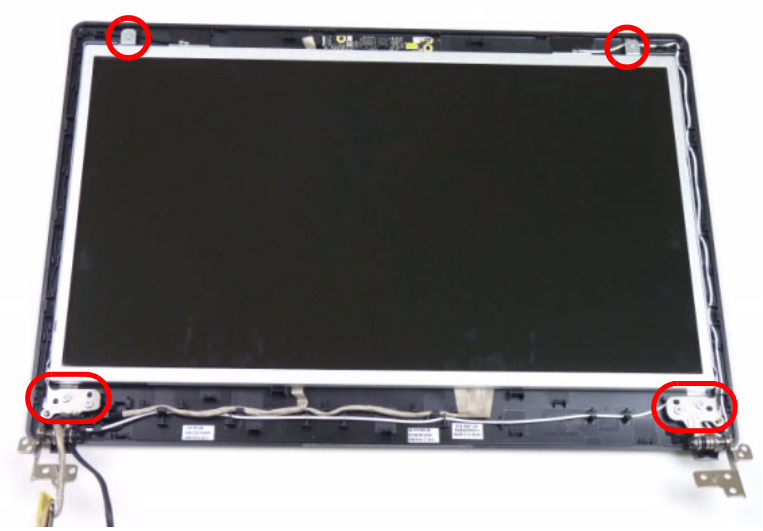
2. Place the LVDS cable into the cable guides.





Downloaded from www.Manualslib.com manuals search engine

3. Replace the six (6) securing screws to secure the LCD panel.



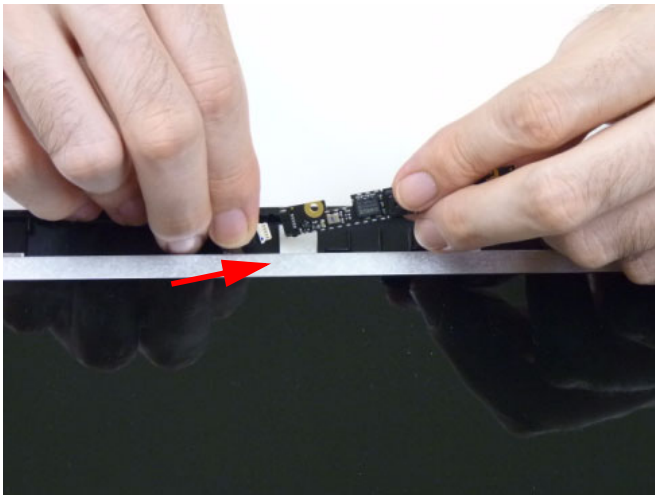
| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Panel Disassembly | M2.5*4.0-I | 6 | |



Downloaded from www.Manualslib.com manuals search engine

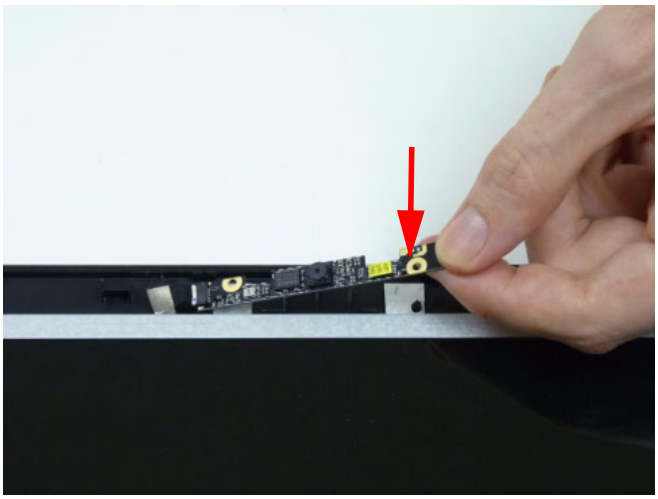
# Replacing the Camera Module

1. Connect the camera cable as shown.



**NOTE:** Take care not to damage the cable.

2. Place the camera module onto the LCD cover. Apply gentle pressure to fix the adhesive.

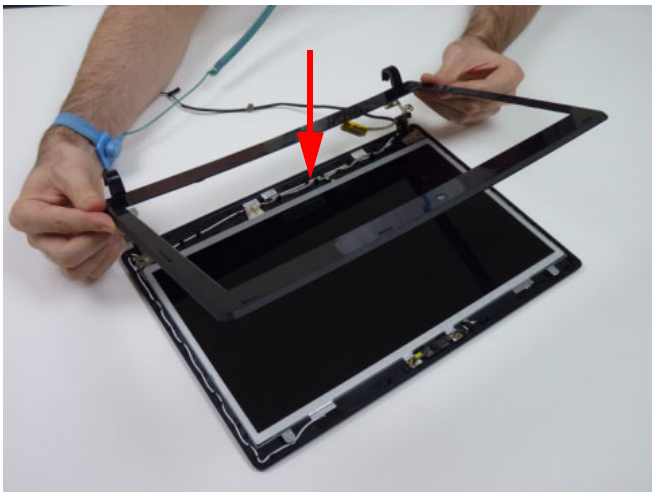




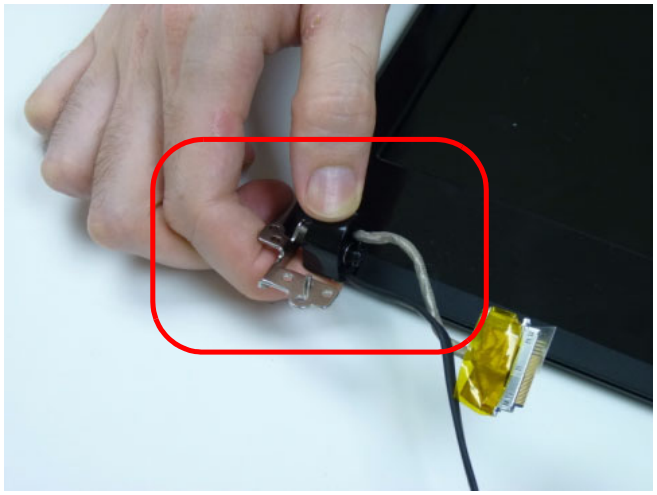
Downloaded from www.Manualslib.com manuals search engine

# Replacing the LCD Bezel

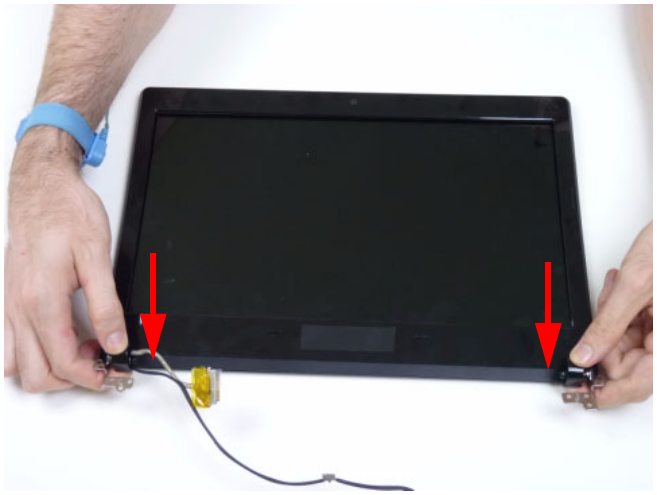
1. Place the bezel hinge covers over the hinges.



2. Ensure the LVDS and WLAN antenna cable bundle are exiting the left hinge as shown.



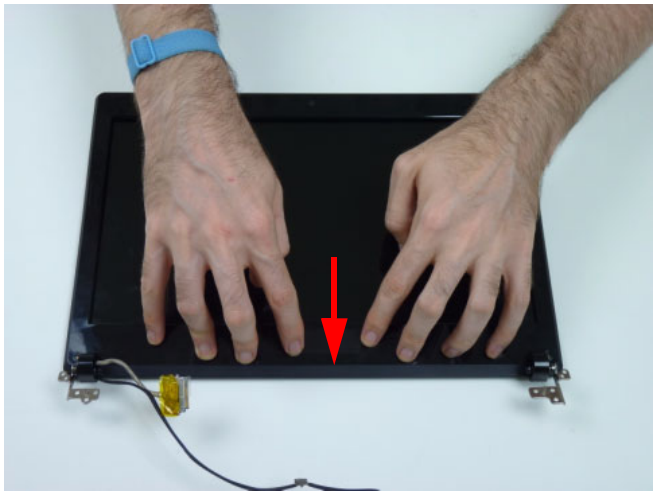
3. Apply pressure to snap the latches together.



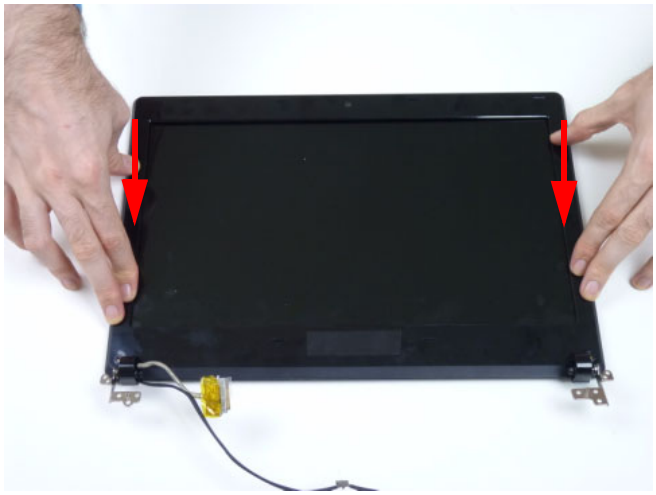


Downloaded from www.Manualslib.com manuals search engine

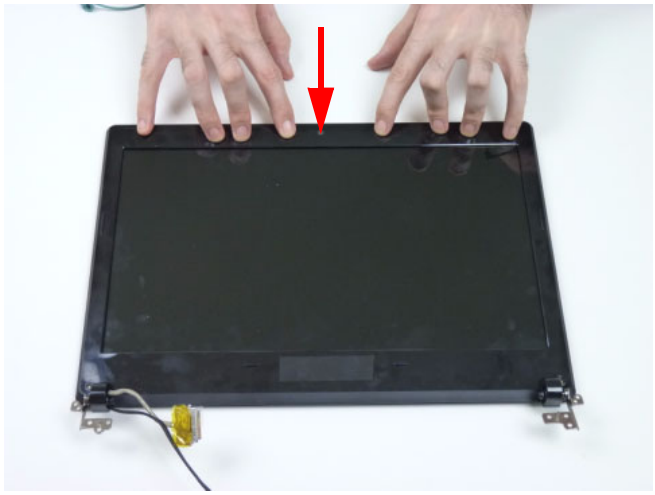
4. Apply pressure along the bottom of the bezel to attach the latches.



5. Apply pressure along the sides of the bezel to attach the latches.



6. Apply pressure along the top of the bezel to attach the latches.





Downloaded from www.Manualslib.com manuals search engine

7. Replace the two (2) bezel screws.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Bezel Disassembly | M2.5*5.0-I | 2 | |

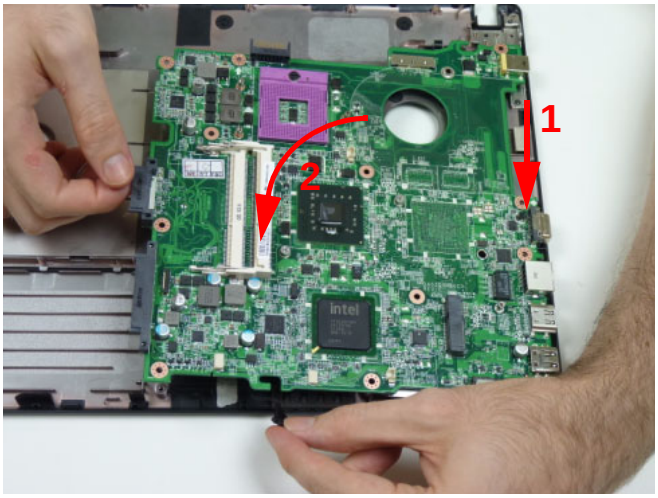


Downloaded from www.Manualslib.com manuals search engine

# Main Unit Assembly Process

## Replacing the Mainboard

1. Place the mainboard onto the upper cover left side first to align the screw holes (1) and then lower the right side (2).



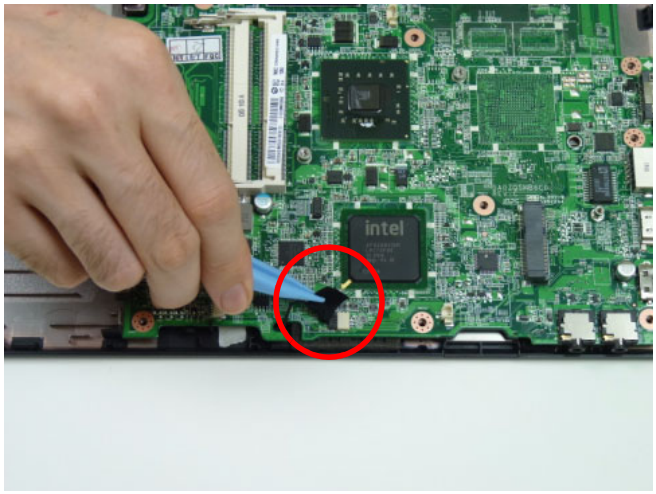

2. Replace the one (1) screw to secure the mainboard to the upper cover.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| Mainboard Disassembly | M2.5*4.0-I | 1 | |

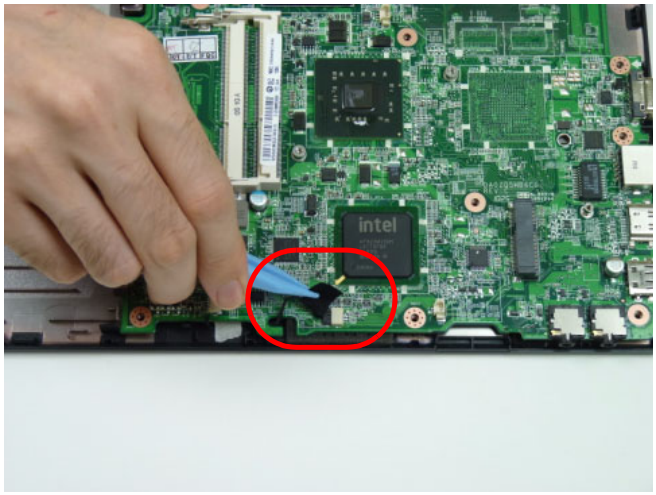


Downloaded from www.Manualslib.com manuals search engine

3. Connect the speaker cable to the mainboard.



4. Secure the speaker cable to the mainboard using the adhesive tape connected to the cable.



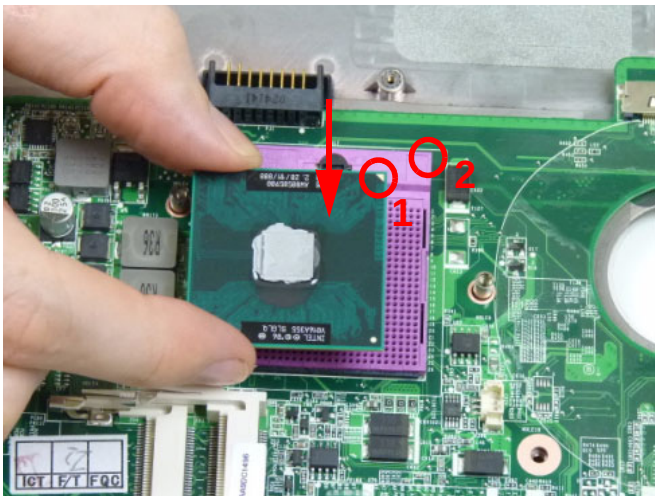


Downloaded from www.Manualslib.com manuals search engine

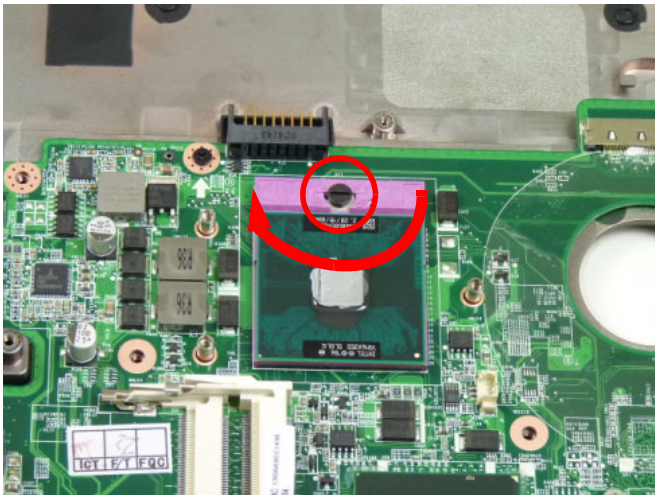
# Replacing the CPU

**IMPORTANT:** The CPU has a Pin1 locator (1) that must be positioned corresponding to the marker (2) on the CPU socket.

1. Place the CPU into the CPU socket as shown, taking note of the Pin1 locator.




2. Using a slotted screw driver, rotate the CPU locking screw 180° clockwise as shown to secure it in the package.





Downloaded from www.Manualslib.com manuals search engine

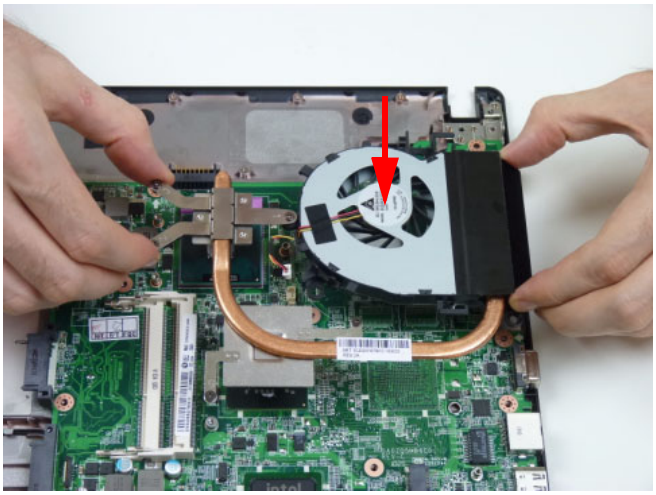
# Replacing the Thermal Module

**IMPORTANT:**Apply suitable thermal pads before replacing the thermal module

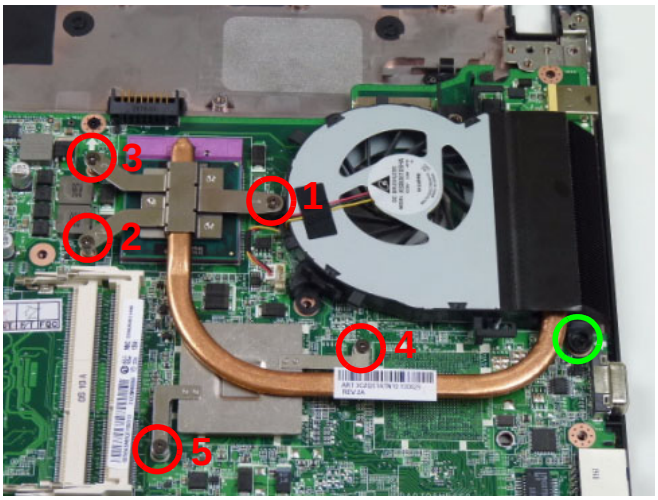
The following thermal materials are approved for use:

- Thermal grease compound
  - Eapus PSX-D
- Thermal pad
  - Denka FSL-BS B6

1. Remove all traces of thermal material from the CPU and thermal module using a lint-free cloth or cotton swab and Isopropyl Alcohol, Acetone, or other approved cleaning agent.
2. Apply a new thermal pad or grease to the center of the processor(s) coming into contact with the thermal module.
3. Align the screw holes on the thermal module to the screw posts on the mainboard, then replace the module. Keep the module as level as possible when replacing.



4. Tighten the five (5) captive screws (in numerical order from 1 to 5) and replace the one (1) screw to secure the CPU thermal module.

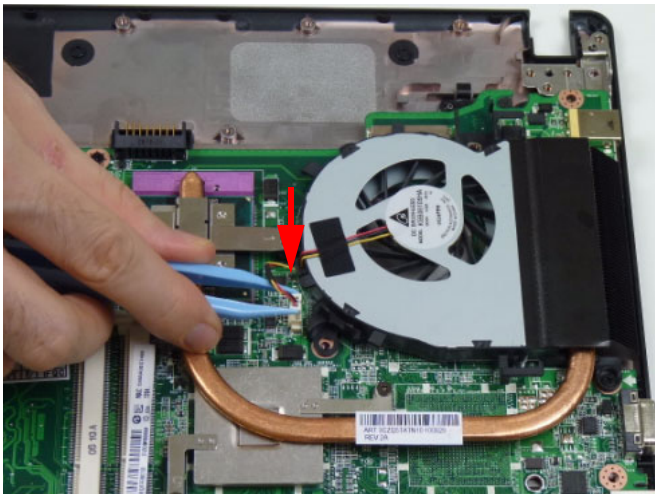



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| Thermal Module Disassembly | M2.5*4.0-I (green callout) | 1 | |



Downloaded from www.Manualslib.com manuals search engine

5. Connect the fan cable as shown.

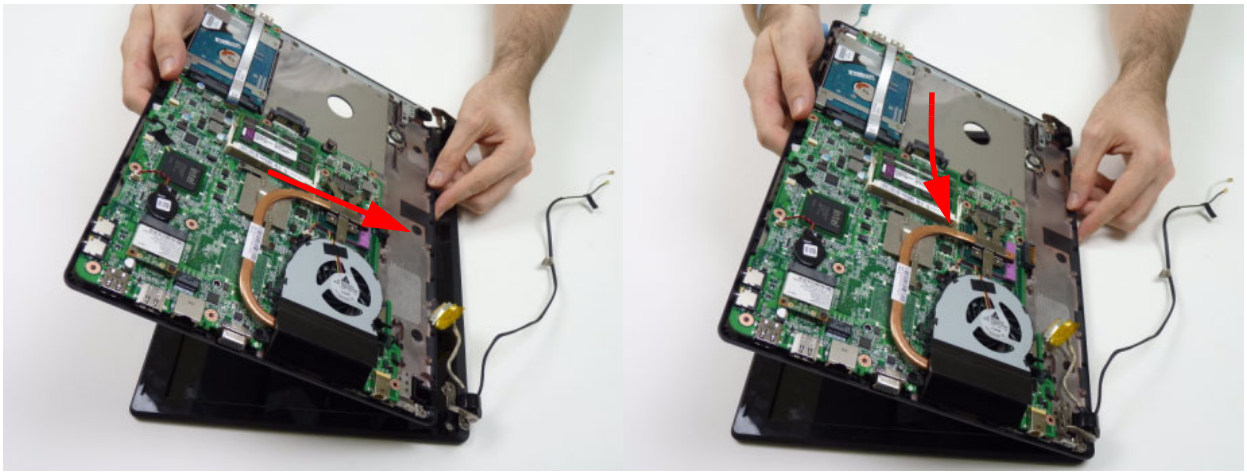




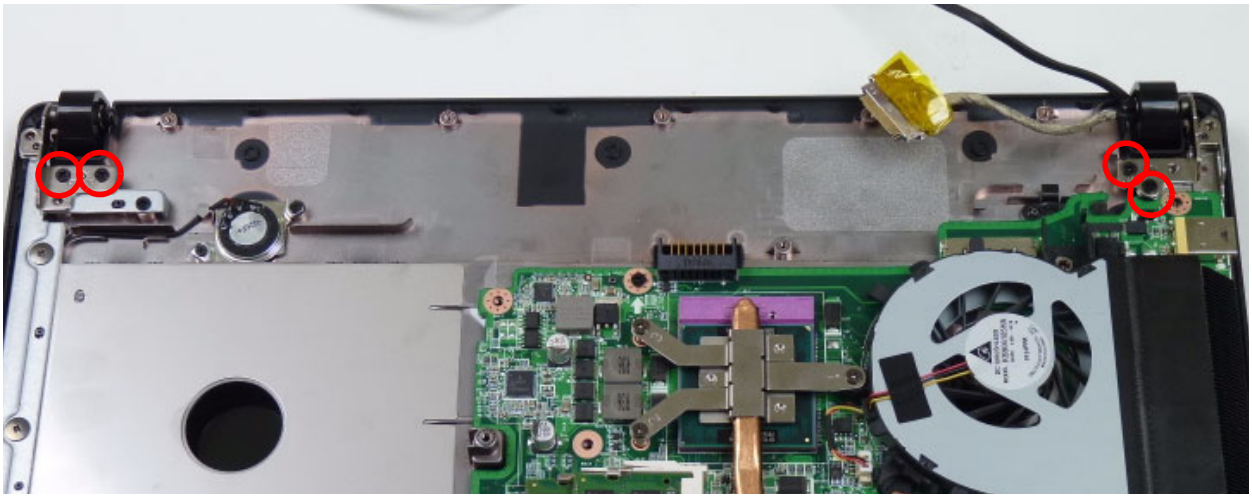
Downloaded from www.Manualslib.com manuals search engine

# Replacing the LCD Module

1. Place the upper cover onto the LCD module and lower into place. Lower the hinges so they are flush with the hinge plates on the upper cover.



2. Replace the four (4) screws to secure the left and right hinges.

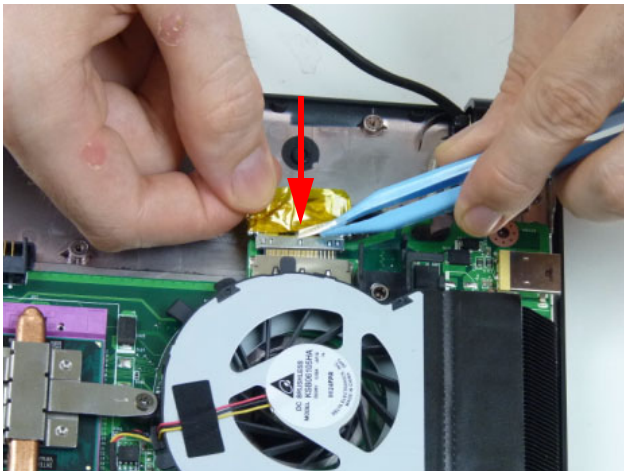


| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| LCD Module Disassembly | M2.5*6.5-I | 4 | |



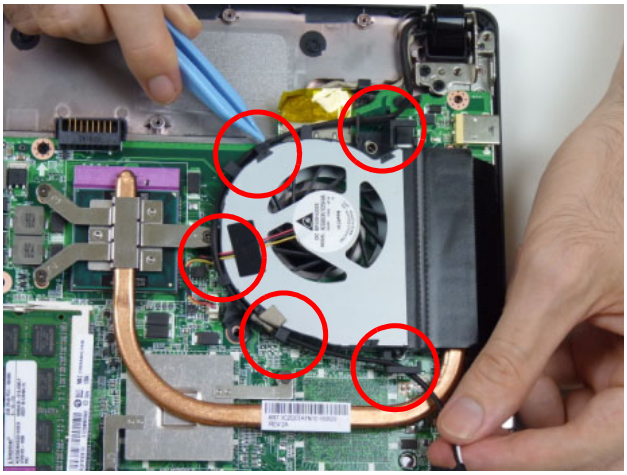
Downloaded from www.Manualslib.com manuals search engine

3. Connect the LVDS cable.



4. Lock the LVDS cable.

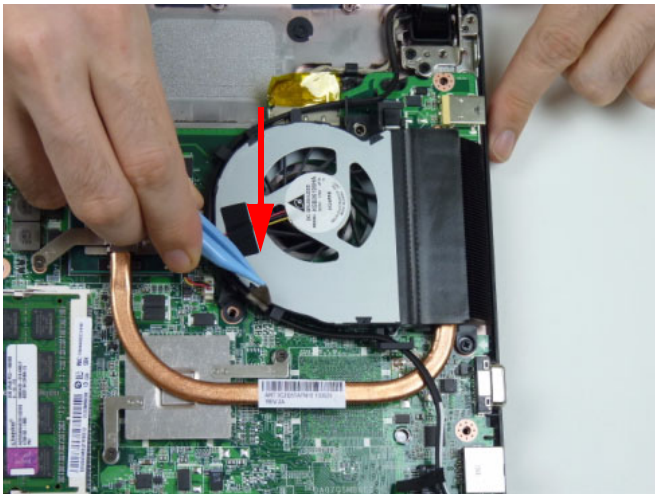
5. Place the WLAN antenna bundle into the cable guides around the fan module.





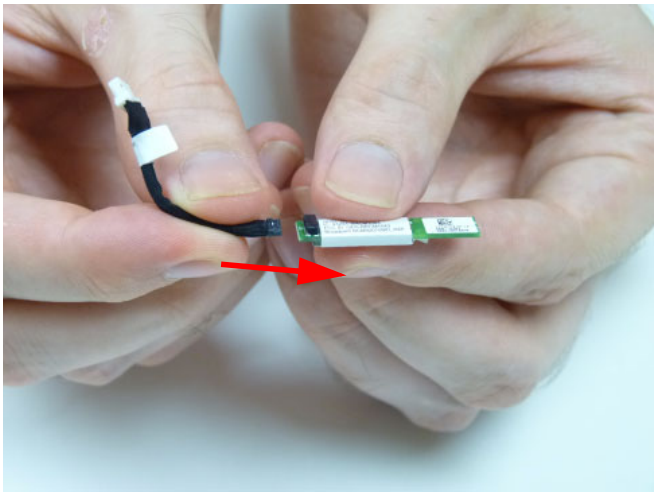
Downloaded from www.Manualslib.com manuals search engine

6. Place the adhesive ground wire attached to the WLAN antenna cable bundle onto the fan housing.



## Replacing the Bluetooth Module

1. Connect the Bluetooth cable to the Bluetooth board.

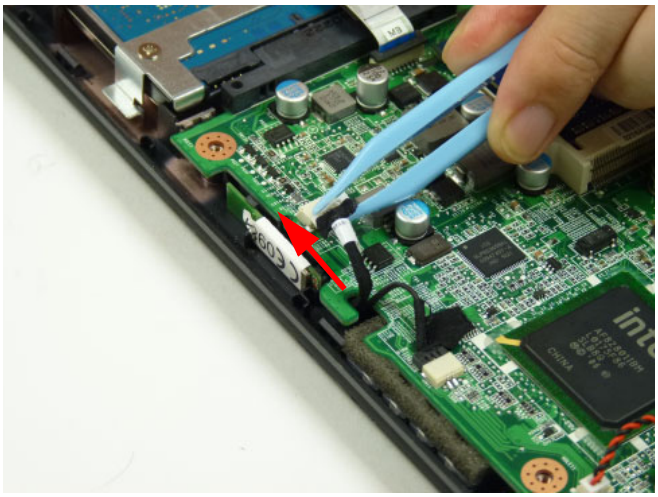


2. Place the connector edge of Bluetooth board into the guides as shown and then place the other end down onto the upper cover.

3. Connect the Bluetooth cable to the mainboard connector.

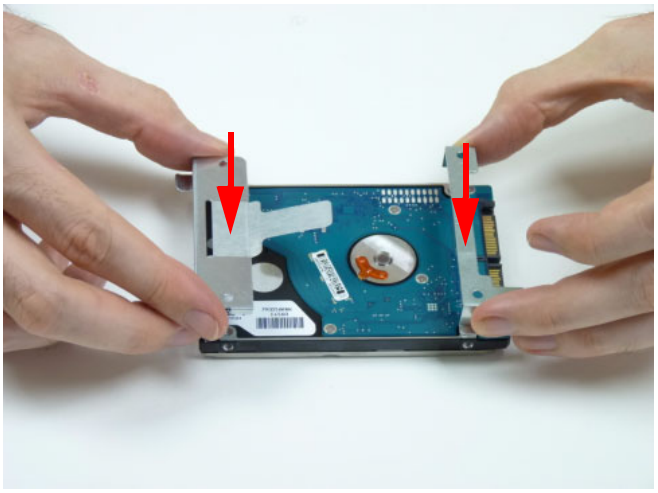


Downloaded from www.Manualslib.com manuals search engine



## Replacing the HDD Module

1. Place the carrier onto the HDD.



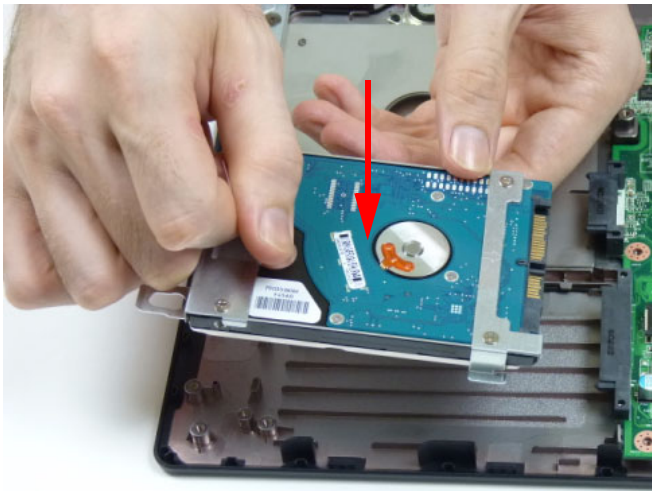
2. Replace the four (4) screws to secure the HDD carrier.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| HDD Carrier Disassembly | M3.0*3.5-NIH | 4 | |

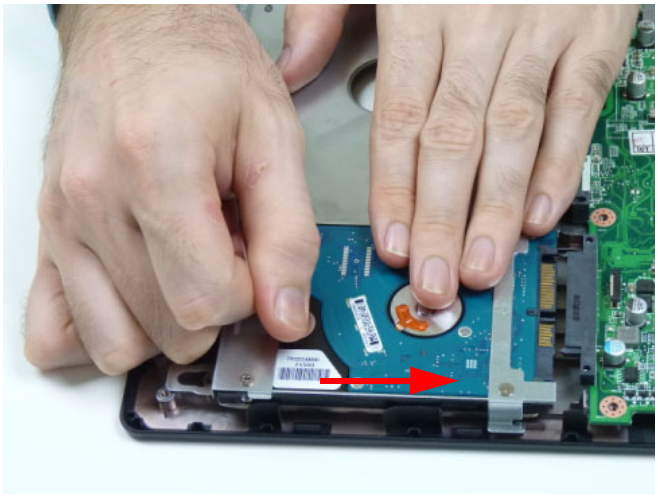


Downloaded from www.Manualslib.com manuals search engine

3. Place HDD in the HDD bay.



4. Using the pull-tab, slide the HDD module in the direction of the arrow to connect the interface.



5. Replace the one (1) screw to secure the HDD module to the upper cover.

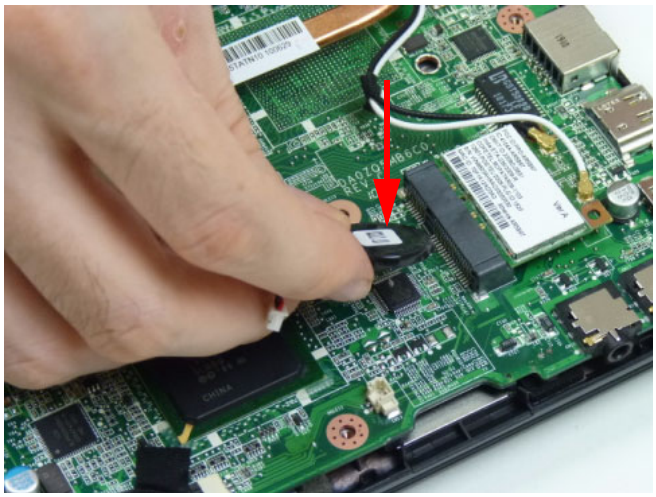
| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| HDD Module | M2-0.4*2-I | 1 | |



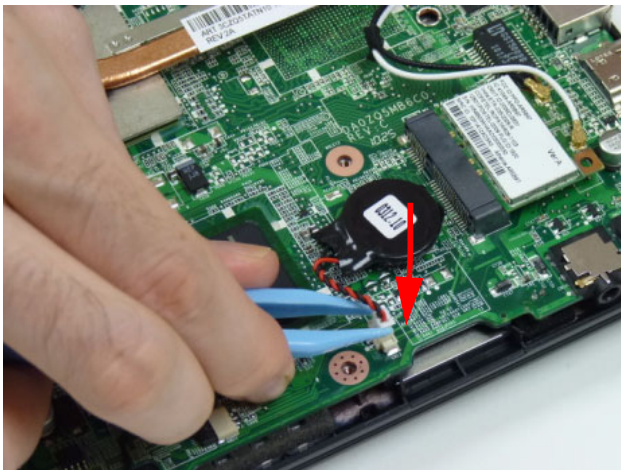
Downloaded from www.Manualslib.com manuals search engine

# Removing the RTC Battery

1. Place the RTC battery onto the mainboard.



2. Connect the RTC battery cable to the mainboard connector.

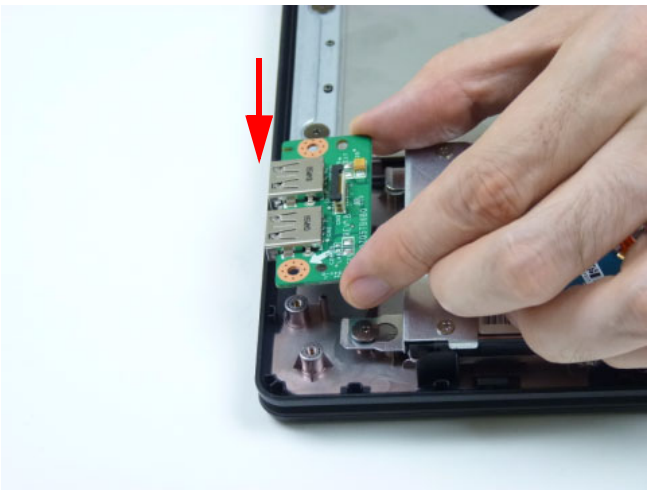




Downloaded from www.Manualslib.com manuals search engine

# Replacing the USB Board

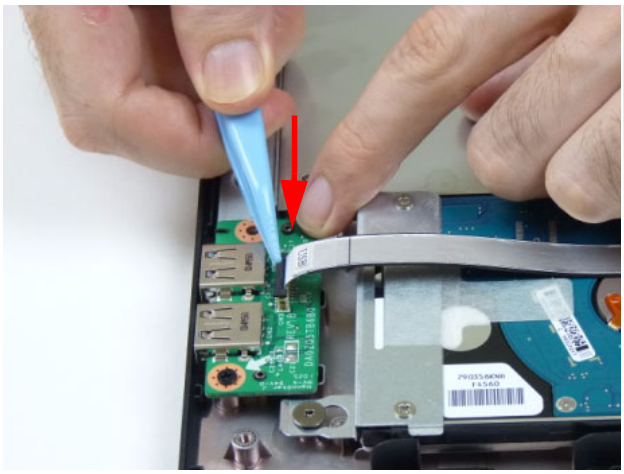
1. Place the USB board onto the chassis.

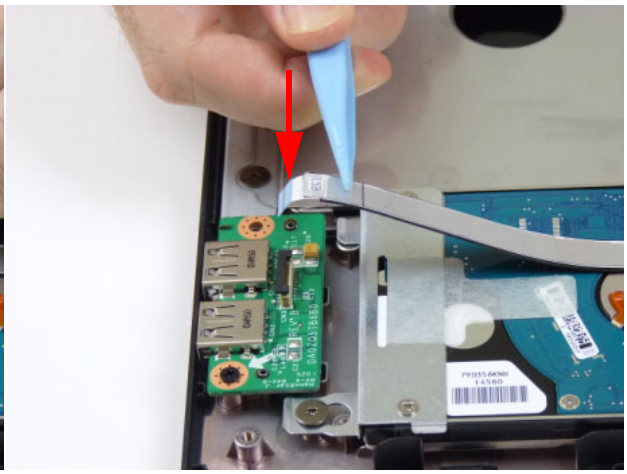


2. Replace one (1) screw to secure the USB board.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| USB Board Disassembly | M2.5*4.0-I | 1 | |

3. Connect and lock the USB FFC to the USB board. Repeat for the mainboard connector.



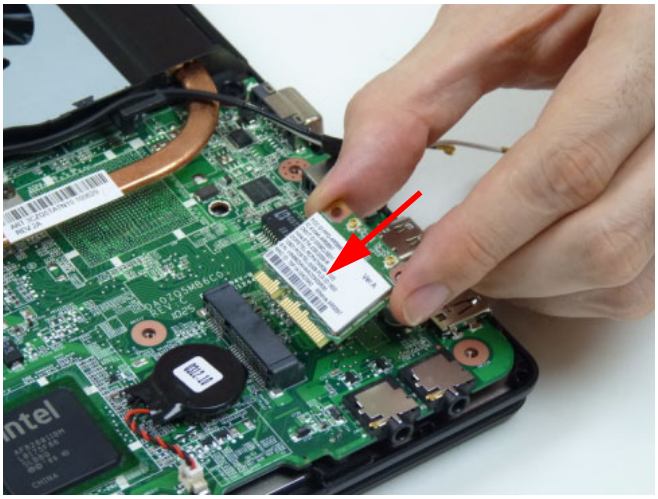




Downloaded from www.Manualslib.com manuals search engine

# Replacing the WLAN Module

1. Insert the WLAN board into the WLAN socket.



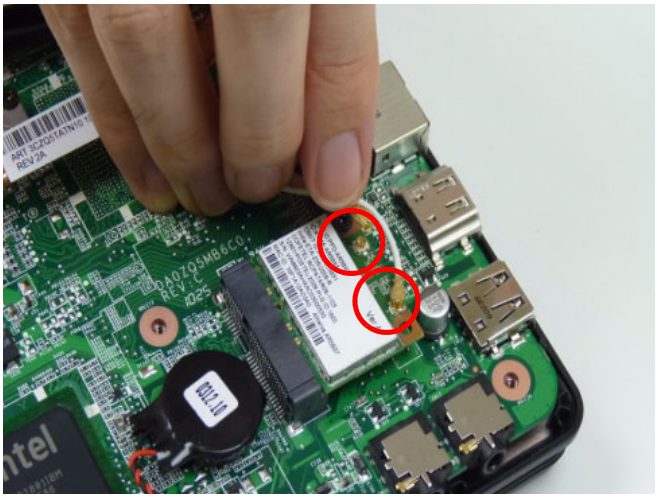
2. Replace the one (1) screw.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| WLAN Board Disassembly | M2.0*3.0-I | 1 | |



Downloaded from www.Manualslib.com manuals search engine

3. Connect the two (2) antenna cables to the WLAN board as shown.



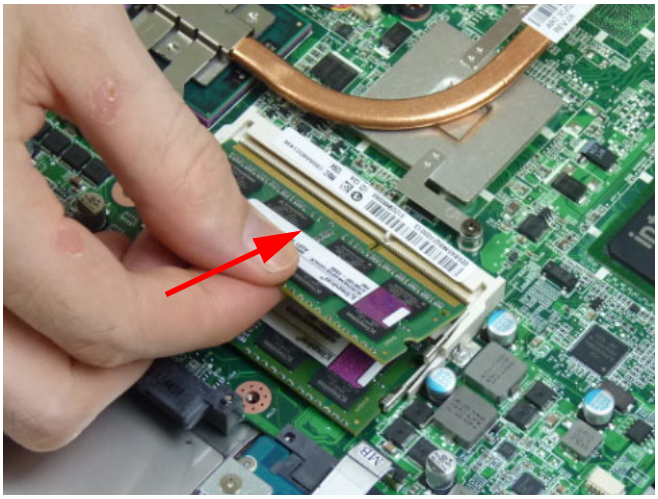
**NOTE:** Cable placement is as follows: black (Main) to connector J1, white (AUX) to connector J2.



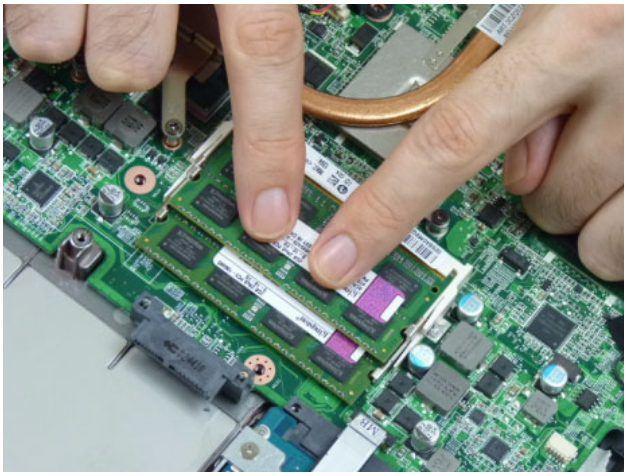
Downloaded from www.Manualslib.com manuals search engine

# Replacing the DIMM Modules

1. Insert the DIMM module into the DIMM connector.



2. Press down to lock the DIMM module in place.



3. Repeat steps 1 and 2 for the second DIMM module if present.

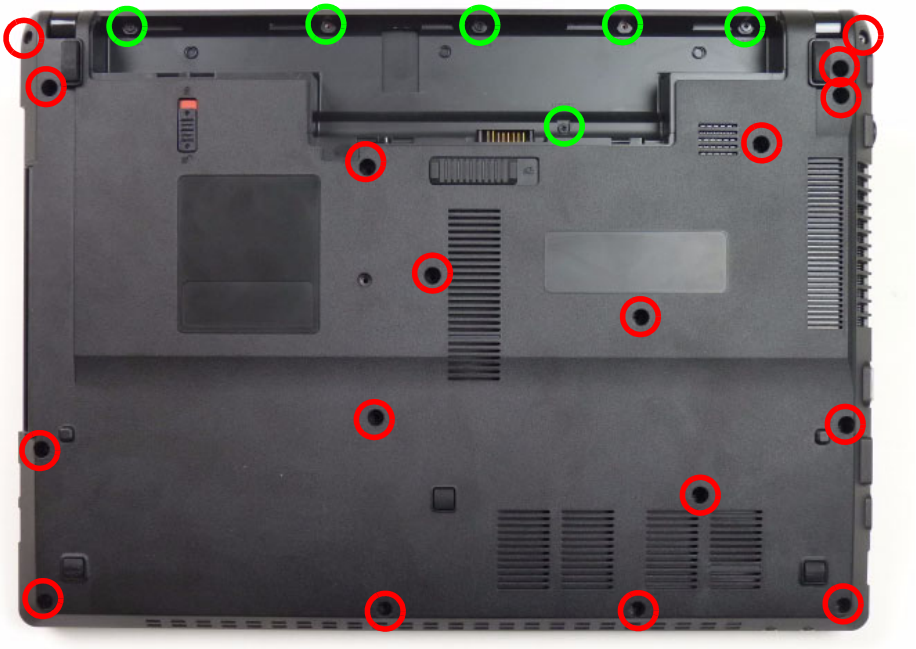


Downloaded from www.Manualslib.com manuals search engine

# Replacing the Lower Cover

1. Place the lower cover onto the device.

2. Replace the twenty three (23) screws to secure the lower cover to the device.



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| Lower Cover (red callout) | M2.5*6.5-I | 17 | |
| Battery Bay (green callout) | M2.0*3.0-I | 6 | |



Downloaded from www.Manualslib.com manuals search engine

# External Module Assembly Process

## Replacing the ODD Module

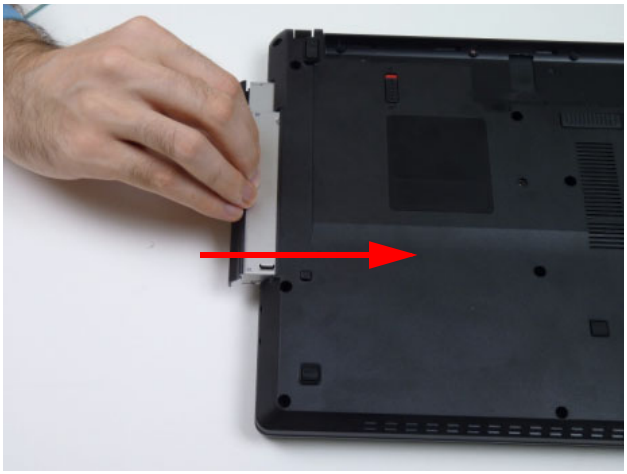
1. Place the ODD bracket onto the ODD module and replace the two (2) screws to secure it.

| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| ODD Bracket Disassembly | M2.0*3.0-I | 2 | |

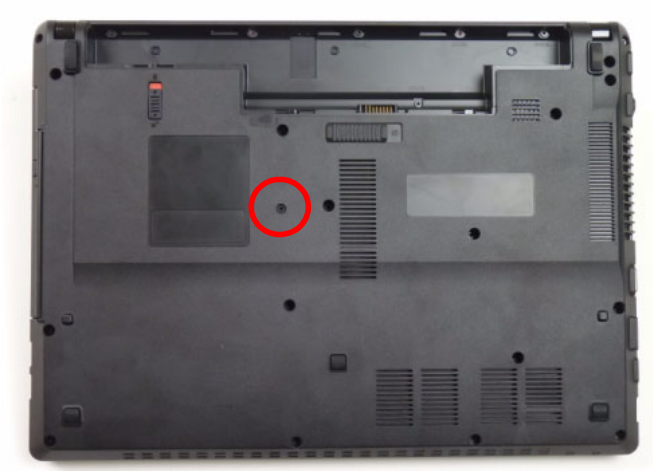
2. Press the bezel into the tray, bottom edge first, to secure it to the ODD module.

Downloaded from www.Manualslib.com manuals search engine

3. Push the ODD module into the ODD bay until it is flush with the casing.



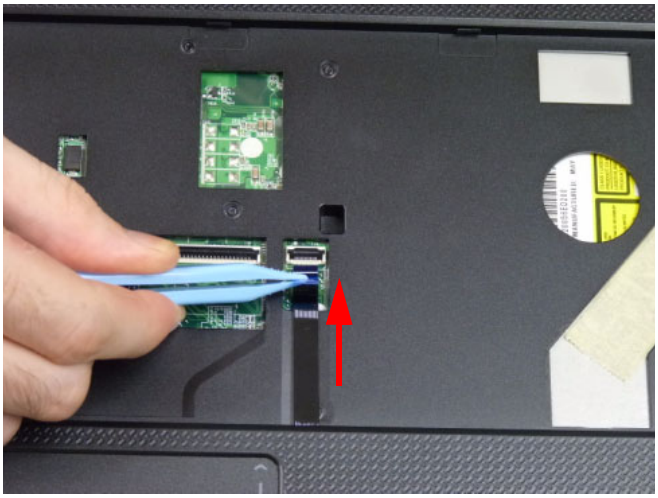
4. Replace the one (1) screw to secure the module.



| Step | Size | Quantity | Screw Type |
|---|---|---|---|
| ODD Bracket Disassembly | M2.5*6.5-I | 1 | |

# Replacing the Keyboard

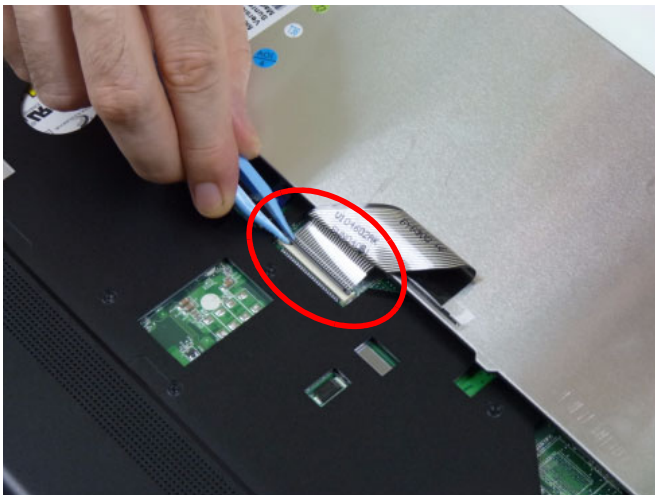
1. Connect and lock the Touchpad FFC to the mainboard connector.





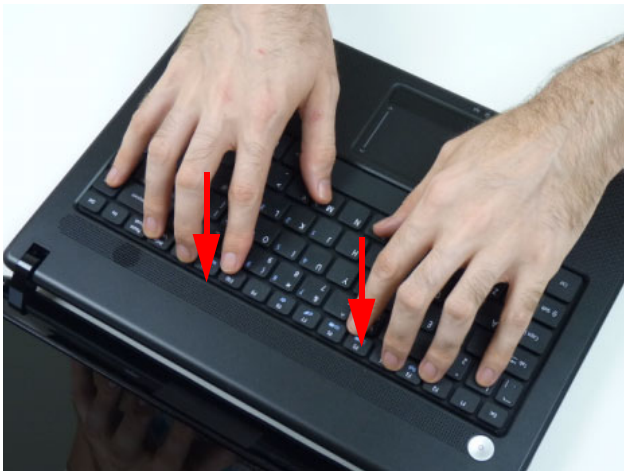
Downloaded from www.Manualslib.com manuals search engine

2. Place the keyboard face down on the upper cover. Connect the keyboard FPC to the mainboard and secure the locking latch.



3. Turn the keyboard over and slide the front edge into the upper cover, ensuring that the four locating tabs are correctly seated.

4. Press down as indicated to secure the keyboard in place.





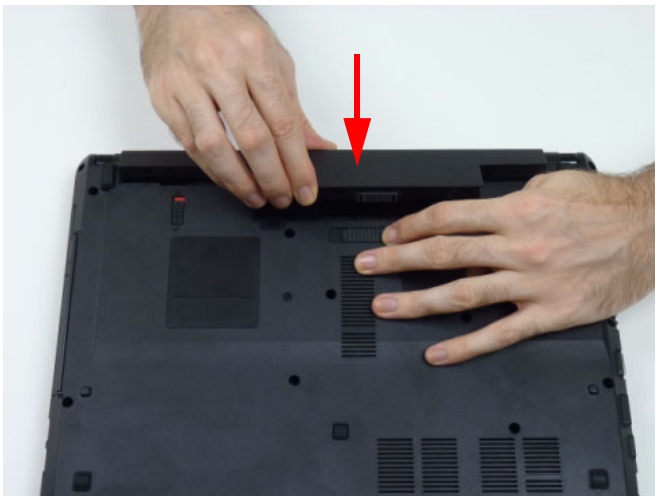
Downloaded from www.Manualslib.com manuals search engine

## Replacing the SD dummy card

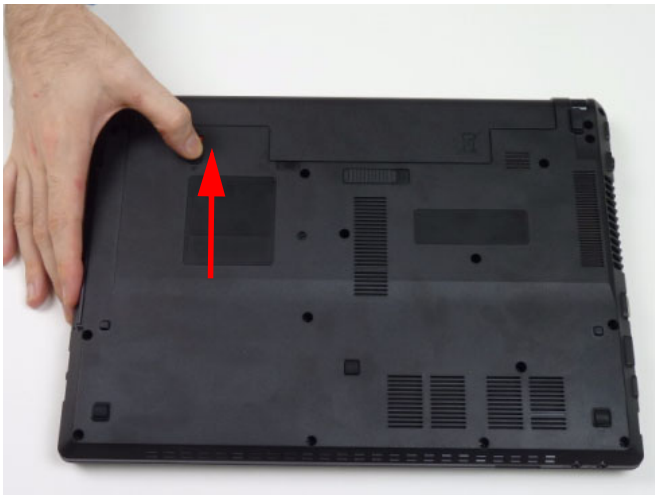
1. Insert the SD dummy card into the slot and push until the card clicks into place and is flush with the casing.

## Replacing the Battery Pack

1. Insert the battery pack and press down.



2. Slide the battery lock in the direction shown to secure the battery in place.





Downloaded from www.Manualslib.com manuals search engine

# Troubleshooting

## Common Problems

Use the following procedure as a guide for computer problems.

**NOTE:** The diagnostic tests are intended to test only Acer products. Non-Acer products, prototype cards, or modified options can give false errors and invalid system responses.

1. Obtain the failing symptoms in as much detail as possible.
2. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
3. Use the following table with the verified symptom to determine which page to go to.

| Symptoms (Verified) | Go To |
|---|---|
| Power On Issue | Page 112 |
| No Display Issue | Page 113 |
| LCD Failure | Page 115 |
| Internal Keyboard Failure | Page 115 |
| Touchpad Failure | Page 116 |
| Internal Speaker Failure | Page 116 |
| ODD Failure | Page 119 |
| WLAN Failure | Page 122 |
| Thermal Unit Failure | Page 122 |
| Other Functions Failure | Page 123 |
| Intermittent Failures | Page 124 |
| Undermined Failures | Page 124 |

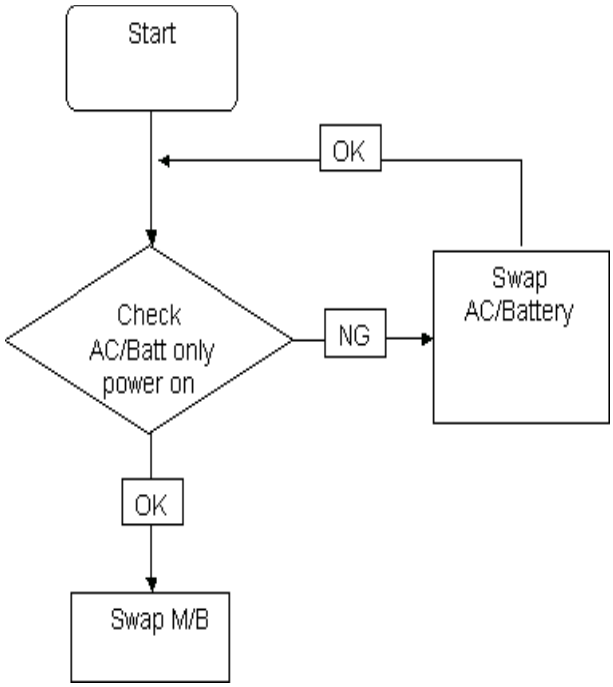
4. If the Issue is still not resolved, see “Online Support Information” on page 155.



Downloaded from www.Manualslib.com manuals search engine

# Power On Issue

If the system doesn't power on, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:




## Computer Shutsdown Intermittently

If the system powers off at intervals, perform the following actions one at a time to correct the problem.

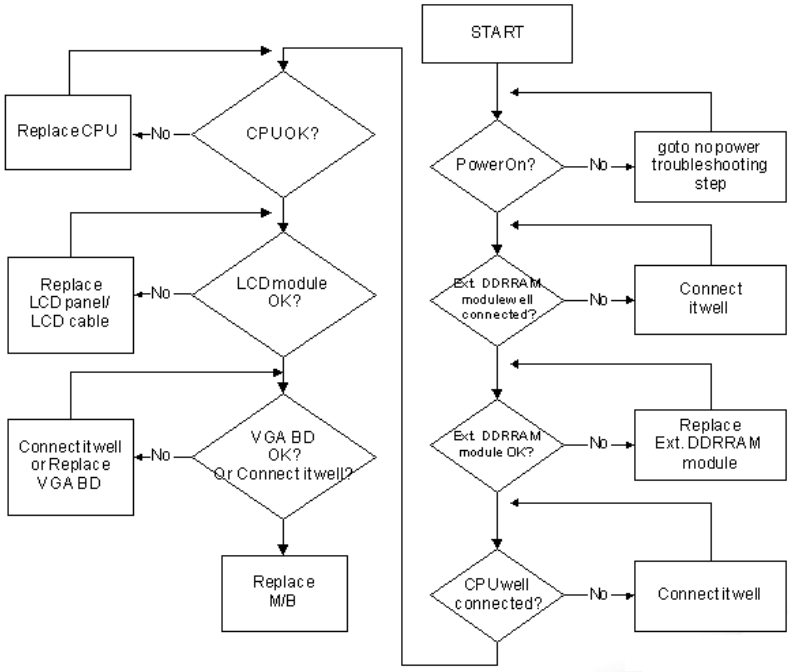
1. Check the power cable is properly connected to the computer and the electrical outlet.
2. Remove any extension cables between the computer and the outlet.
3. Remove any surge protectors between the computer and the electrical outlet. Plug the computer directly into a known good electrical outlet.
4. Disconnect the power and open the casing to check the Thermal Unit (see "Thermal Unit Failure" on page 122) and fan airways are free of obstructions.
5. Remove all external and non-essential hardware connected to the computer that are not necessary to boot the computer to the failure point.
6. Remove any recently installed software.
7. If the Issue is still not resolved, see "Online Support Information" on page 155.



Downloaded from www.Manualslib.com manuals search engine

# No Display Issue

If the **Display** doesn't work, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:




# No POST or Video

If the POST or video doesn't display, perform the following actions one at a time to correct the problem.

1. Make sure that the internal display is selected. On this notebook model, switching between the internal display and the external display is done by pressing **Fn+F5**. Reference Product pages for specific model procedures.
2. Make sure the computer has power by checking at least one of the following occurs:
   - Fans start up
   - Status LEDs light up

   If there is no power, see "Power On Issue" on page 112.
3. Drain any stored power by removing the power cable and battery and holding down the power button for 10 seconds. Reconnect the power and reboot the computer.
4. Connect an external monitor to the computer and switch between the internal display and the external display is by pressing **Fn+F5** (on this model).

   If the POST or video appears on the external display, see "LCD Failure" on page 115.
5. Disconnect power and all external devices including port replicators or docking stations. Remove any memory cards and CD/DVD discs. Restart the computer.

   If the computer boots correctly, add the devices one by one until the failure point is discovered.
6. Reseat the memory modules.
7. Remove the drives (see "Disassembly Process" on page 47).
8. If the Issue is still not resolved, see "Online Support Information" on page 155.



Downloaded from www.Manualslib.com manuals search engine

## Abnormal Video Display

If video displays abnormally, perform the following actions one at a time to correct the problem.

1. Reboot the computer.
2. If permanent vertical/horizontal lines or dark spots display in the same location, the LCD is faulty and should be replaced. See “Disassembly Process” on page 47.
3. If extensive pixel damage is present (different colored spots in the same locations on the screen), the LCD is faulty and should be replaced. See “Main Unit Disassembly Process” on page 55.
4. Adjust the brightness to its highest level. See the User Manual for instructions on adjusting settings.
   **NOTE:** Ensure that the computer is not running on battery alone as this may reduce display brightness.

   If the display is too dim at the highest brightness setting, the LCD is faulty and should be replaced. See “Disassembly Process” on page 47.
5. Check the display resolution is correctly configured:
   a. Minimize or close all Windows.
   b. If display size is only abnormal in an application, check the view settings and control/mouse wheel zoom feature in the application.
   c. If desktop display resolution is not normal, right-click on the desktop and select **Personalize→ Display Settings**.
   d. Click and drag the Resolution slider to the desired resolution.
   e. Click **Apply** and check the display. Readjust if necessary.
6. Roll back the video driver to the previous version if updated.
7. Remove and reinstall the video driver.
8. Check the Device Manager to determine that:
   - The device is properly installed. There are no red Xs or yellow exclamation marks.
   - There are no device conflicts.
   - No hardware is listed under Other Devices.
9. If the Issue is still not resolved, see “Online Support Information” on page 155.
10. Run the Windows Memory Diagnostic from the operating system DVD and follow the onscreen prompts.
11. If the Issue is still not resolved, see “Online Support Information” on page 155.

# Random Loss of BIOS Settings

If the computer is experiencing intermittent loss of BIOS information, perform the following actions one at a time to correct the problem.

1. If the computer is more than one year old, replace the CMOS battery.
2. Run a complete virus scan using up-to-date software to ensure the computer is virus free.
3. If the computer is experiencing HDD or ODD BIOS information loss, disconnect and reconnect the power and data cables between devices.

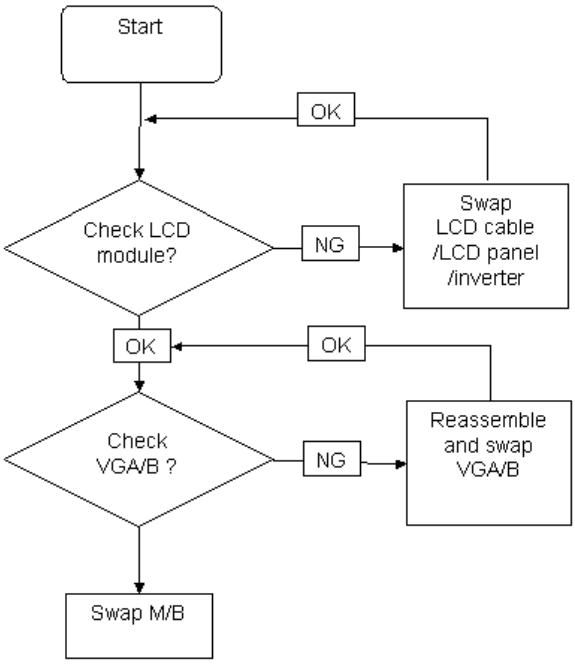
   If the BIOS settings are still lost, replace the cables.
4. If HDD information is missing from the BIOS, the drive may be defective and should be replaced.
5. Replace the Motherboard.
6. If the Issue is still not resolved, see “Online Support Information” on page 155.



Downloaded from www.Manualslib.com manuals search engine

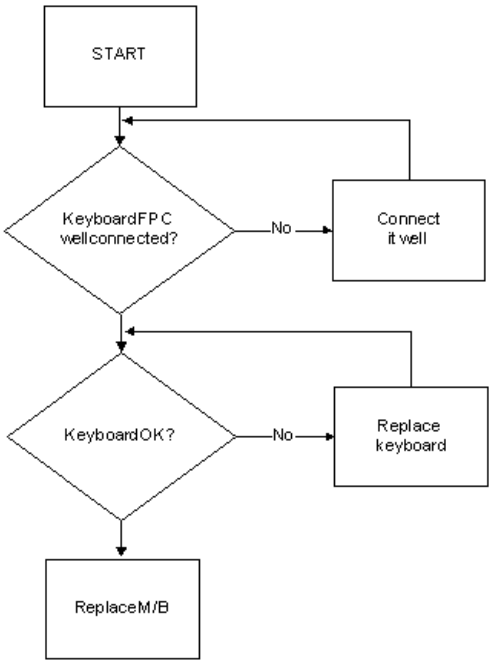
# LCD Failure

If the **LCD** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:




# Built-In Keyboard Failure

If the built-in **Keyboard** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:

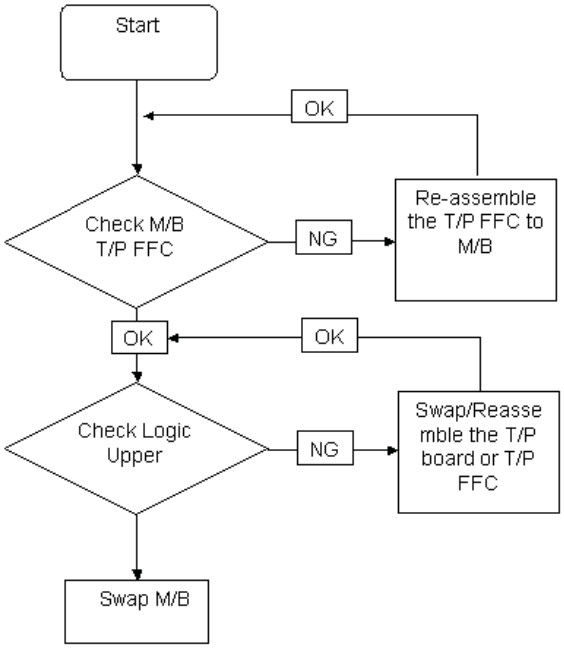





Downloaded from www.Manualslib.com manuals search engine

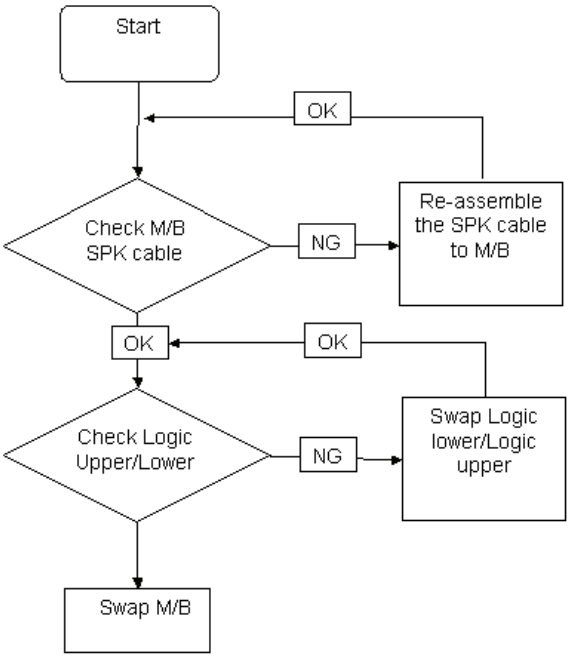
# Touchpad Failure

If the **Touchpad** doesn't work, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:




# Internal Speaker Failure

If the internal **Speakers** fail, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:






Downloaded from www.Manualslib.com manuals search engine

## Sound Problems

If sound problems are experienced, perform the following actions one at a time to correct the problem.

1. Reboot the computer.
2. Navigate to **Start→ Control Panel→ System and Maintenance→ System→ Device Manager**. Check the Device Manager to determine that:
   - The device is properly installed.
   - There are no red Xs or yellow exclamation marks.
   - There are no device conflicts.
   - No hardware is listed under Other Devices.
3. Roll back the audio driver to the previous version, if updated recently.
4. Remove and reinstall the audio driver.
5. Ensure that all volume controls are set mid range:
   a. Click the volume icon on the taskbar and drag the slider to 50. Ensure that the volume is not muted.
   b. Click Mixer to verify that other audio applications are set to 50 and not muted.
6. Navigate to **Start→ Control Panel→ Hardware and Sound→ Sound**. Ensure that Speakers are selected as the default audio device (green check mark).
   **NOTE:** If Speakers does not show, right-click on the **Playback** tab and select **Show Disabled Devices** (clear by default).
7. Select Speakers and click **Configure** to start **Speaker Setup**. Follow the onscreen prompts to configure the speakers.
8. Remove and recently installed hardware or software.
9. Restore system and file settings from a known good date using **System Restore**.
   If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
10. Reinstall the Operating System.
11. If the Issue is still not resolved, see “Online Support Information” on page 155.

## Microphone Problems

If internal or external **Microphones** do no operate correctly, perform the following actions one at a time to correct the problem.

1. Check that the microphone is enabled. Navigate to **Start→ Control Panel→ Hardware and Sound→ Sound** and select the **Recording** tab.
2. Right-click on the **Recording** tab and select **Show Disabled Devices** (clear by default).
3. The microphone appears on the **Recording** tab.
4. Right-click on the microphone and select **Enable**.
5. Select the microphone then click **Properties**. Select the **Levels** tab.
6. Increase the volume to the maximum setting and click **OK**.
7. Test the microphone hardware:
   a. Select the microphone and click **Configure**.
   b. Select **Set up microphone**.
   c. Select the microphone type from the list and click **Next**.
   d. Follow the onscreen prompts to complete the test.
8. If the Issue is still not resolved, see “Online Support Information” on page 155.



Downloaded from www.Manualslib.com manuals search engine

# HDD Not Operating Correctly

If the **HDD** does not operate correctly, perform the following actions one at a time to correct the problem.

1. Disconnect all external devices.
2. Run a complete virus scan using up-to-date software to ensure the computer is virus free.
3. Run the Windows 7 Startup Repair Utility:
   a. insert the Windows 7 Operating System DVD in the ODD and restart the computer.
   b. When prompted, press any key to start to the operating system DVD.
   c. The **Install Windows** screen displays. Click **Next**.
   d. Select **Repair your computer**.
   e. The **System Recovery Options** screen displays. Click **Next**.
   f. Select the appropriate operating system, and click **Next**.

   **NOTE:** Click **Load Drivers** if controller drives are required.

   g. Select **Startup Repair**.
   h. Startup Repair attempts to locate and resolve issues with the computer.
   i. When complete, click **Finish**.

   If an issue is discovered, follow the onscreen information to resolve the problem.
4. Run the Windows Memory Diagnostic Tool. For more information see Windows Help and Support.
5. Restart the computer and press F2 to enter the BIOS Utility. Check the BIOS settings are correct and that CD/DVD drive is set as the first boot device on the Boot menu.
6. Ensure all cables and jumpers on the HDD and ODD are set correctly.
7. Remove any recently added hardware and associated software.
8. Run the Windows Disk Defragmenter. For more information see Windows Help and Support.
9. Run Windows Check Disk by entering **chkdsk /r** from a command prompt. For more information see Windows Help and Support.
10. Restore system and file settings from a known good date using **System Restore**.

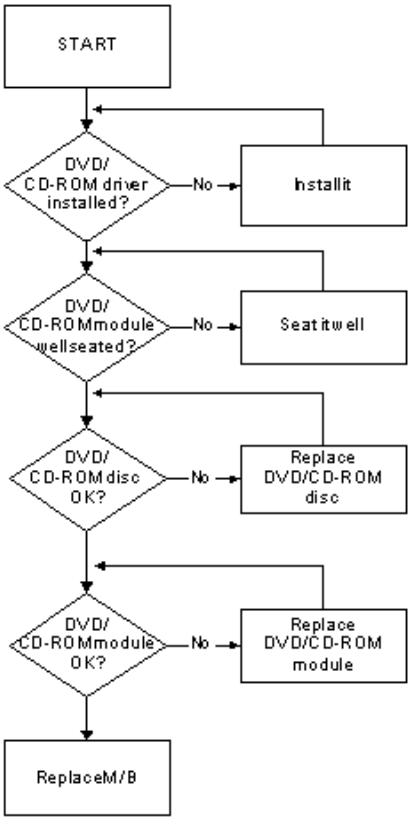
    If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
11. Replace the HDD. See “Main Unit Disassembly Process” on page 55.



Downloaded from www.Manualslib.com manuals search engine

# ODD Failure

If the **ODD** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:




## ODD Not Operating Correctly

If the **ODD** exhibits any of the following symptoms it may be faulty:

- Audio CDs do not play when loaded
- DVDs do not play when loaded
- Blank discs do not burn correctly
- DVD or CD play breaks up or jumps
- Optical drive not found or not active:
  - Not shown in My Computer or the BIOS setup
  - LED does not flash when the computer starts up
  - The tray does not eject
- Access failure screen displays
- The ODD is noisy

Perform the following general solutions one at a time to correct the problem.

1. Reboot the computer and retry the operation.
2. Try an alternate disc.
3. Navigate to **Start→ Computer**. Check that the ODD device is displayed in the **Devices with Removable Storage** panel.
4. Navigate to **Start→ Control Panel→ System and Maintenance→ System→ Device Manager**.



Downloaded from www.Manualslib.com manuals search engine

a. Double-click **IDE ATA/ATAPI controllers**. If a device displays a down arrow, right-click on the device and click **Enable**.

b. Double-click **DVD/CD-ROM drives**. If the device displays a down arrow, right-click on the device and click **Enable**.

c. Check that there are no yellow exclamation marks against the items in **IDE ATA/ATAPI controllers**. If a device has an exclamation mark, right-click on the device and uninstall and reinstall the driver.

d. Check that there are no yellow exclamation marks against the items in **DVD/CD-ROM drives**. If a device has an exclamation mark, right-click on the device and uninstall and reinstall the driver.

e. If the exclamation marker is not removed from the item in the lists, try removing any recently installed software and retrying the operation.

### Discs Do Not Play

If discs do not play when inserted in the drive, perform the following actions one at a time to correct the problem.

1. Check that the disc is correctly seated in the drive tray and that the label on the disc is visible.
2. Check that the media is clean and scratch free.
3. Try an alternate disc in the drive.
4. Ensure that **AutoPlay** is enabled:
   a. Navigate to **Start**→ **Control Panel**→ **Hardware and Sound**→ **AutoPlay**.
   b. Select **Use AutoPlay for all media and devices**.
   c. In the Audio CD and DVD Movie fields, select the desired player from the drop down menu.
5. Check that the Regional Code is correct for the selected media:

**IMPORTANT:**Region can only be changed a limited number of times. After Changes remaining reaches zero, the region cannot be changed even Windows is reinstalled or the drive is moved to another computer.

a. Navigate to **Start**→ **Control Panel**→ **System and Maintenance**→ **System**→ **Device Manager**.

b. Double-click **DVD/CD-ROM drives**.

c. Right-click **DVD drive** and click **Properties**, then click the **DVD Region** tab.

d. Select the region suitable for the media inserted in the drive.

### Discs Do Not Burn Properly

If discs can not be burned, perform the following actions one at a time to correct the problem.

1. Ensure that the default drive is record enabled:
   a. Navigate to **Start**→ **Computer** and right-click the writable ODD icon. Click **Properties**.
   b. Select the **Recording** tab. In the **Desktop disc recording** panel, select the writable ODD from the drop down list.
   c. Click **OK**.
2. Ensure that the software used for burning discs is the factory default. If using different software, refer to the software's user manual.

### Playback is Choppy

If playback is choppy or jumps, perform the following actions one at a time to correct the problem.

1. Check that system resources are not running low:
   a. Try closing some applications.
   b. Reboot and try the operation again.
2. Check that the ODD controller transfer mode is set to DMA:
   a. Navigate to **Start**→ **Control Panel**→ **System and Maintenance**→ **System**→ **Device Manager**.



Downloaded from www.Manualslib.com manuals search engine

b. Double-click **IDE ATA/ATAPI controllers**, then right-click ATA Device 0.

c. Click **Properties** and select the **Advanced Settings** tab. Ensure that the **Enable DMA** box is checked and click **OK**.

d. Repeat for the other ATA Devices shown if applicable.

### Drive Not Detected

If Windows cannot detect the drive, perform the following actions one at a time to correct the problem.

1. Restart the computer and press F2 to enter the BIOS Utility.
2. Check that the drive is detected in the **ATAPI Model Name** field on the Information page.

   **NOTE:** Check that the entry is identical to one of the ODDs specified in “Hardware Specifications and Configurations” on page 16.
3. Turn off the power and remove the cover to inspect the connections to the ODD. See “Disassembly Process” on page 47.

   a. Check for broken connectors on the drive, motherboard, and cables.

   b. Check for bent or broken pins on the drive, motherboard, and cable connections.

   c. Try an alternate cable, if available. If the drive works with the new cable, the original cable should be replaced.
4. Reseat the drive ensuring and all cables are connected correctly.
5. Replace the ODD. See “Disassembly Process” on page 47.

### Drive Read Failure

If discs cannot be read when inserted in the drive, perform the following actions one at a time to correct the problem.

1. Remove and clean the failed disc.
2. Retry reading the CD or DVD.

   d. Test the drive using other discs.

   e. Play a DVD movie

   f. Listen to a music CD

   If the ODD works properly with alternate discs, the original disc is probably defective and should be replaced.
3. Turn off the power and remove the cover to inspect the connections to the ODD. See “Disassembly Process” on page 47.

   a. Check for broken connectors on the drive, motherboard, and cables.

   b. Check for bent or broken pins on the drive, motherboard, and cable connections.

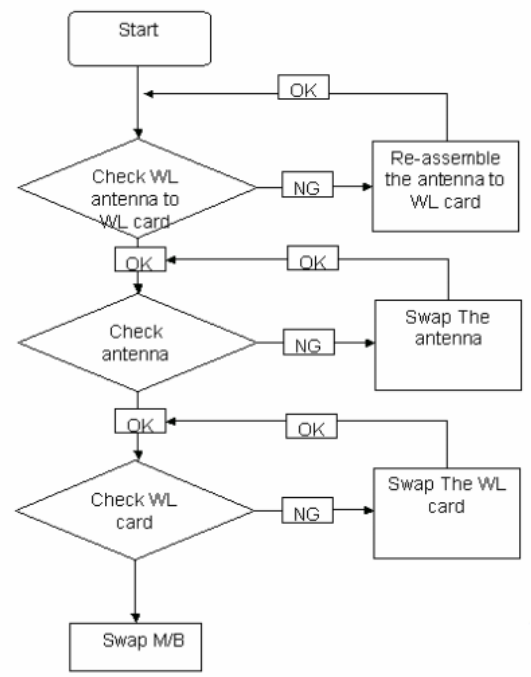
   c. Try an alternate cable, if available. If the drive works with the new cable, the original cable should be replaced.
4. Replace the ODD. See “Disassembly Process” on page 47.



Downloaded from www.Manualslib.com manuals search engine

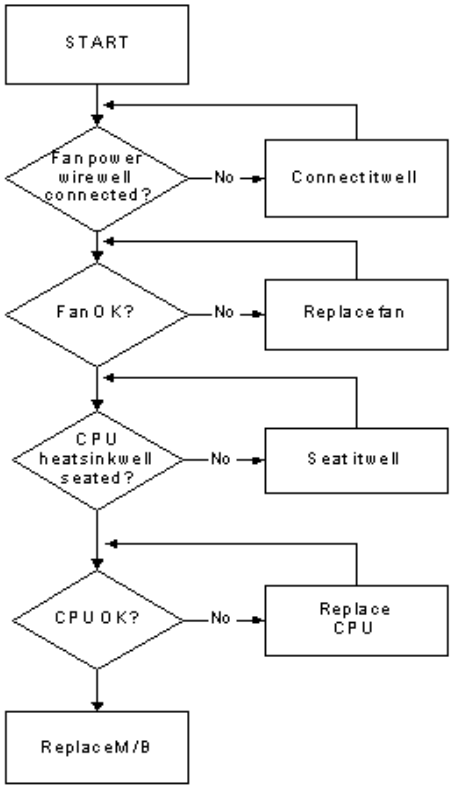
# Wireless Function Failure

If the **WLAN** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:




# Thermal Unit Failure

If the **Thermal Unit** fails, perform the following actions one at a time to correct the problem. Do not replace a non-defective FRUs:






Downloaded from www.Manualslib.com manuals search engine

## External Mouse Failure

If an external **Mouse** fails, perform the following actions one at a time to correct the problem.

1. Try an alternative mouse.
2. If the mouse uses a wireless connection, insert new batteries and confirm there is a good connection. See the mouse user manual.
3. If the mouse uses a USB connection, try an alternate USB port.
4. Try an alternative program to verify mouse operation. Reinstall the program experiencing mouse failure.
5. Restart the computer.
6. Remove any recently added hardware and associated software.
7. Remove any recently added software and reboot.
8. Restore system and file settings from a known good date using **System Restore**.

   If the issue is not fixed, repeat the preceding steps and select an earlier time and date.
9. Run the Event Viewer to check the events log for errors. For more information see Windows Help and Support.
10. Roll back the mouse driver to the previous version if updated recently.
11. Remove and reinstall the mouse driver.
12. Check the Device Manager to determine that:
    - The device is properly installed. There are no red Xs or yellow exclamation marks.
    - There are no device conflicts.
    - No hardware is listed under Other Devices.
13. If the Issue is still not resolved, see “Online Support Information” on page 155.

## Other Failures

If the CRT Switch, Dock, LAN Port, external MIC or Speakers, PCI Express Card, 5-in-1 Card Reader or Volume Wheel fail, perform the following general steps to correct the problem. Do not replace a non-defective FRUs:

1. Check Drive whether is OK.
2. Check Test Fixture is ok.
3. Swap M/B to Try.



Downloaded from www.Manualslib.com manuals search engine

# Intermittent Problems

Intermittent system hang problems can be caused by a variety of reasons that have nothing to do with a hardware defect, such as: cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a recurring problem exists.

When analyzing an intermittent problem, do the following:

1. Run the advanced diagnostic test for the system board in loop mode at least 10 times.
2. If no error is detected, do not replace any FRU.
3. If any error is detected, replace the FRU. Rerun the test to verify that there are no more errors.

# Undetermined Problems

The diagnostic problems does not identify which adapter or device failed, which installed devices are incorrect, whether a short circuit is suspected, or whether the system is inoperative.

Follow these procedures to isolate the failing FRU (do not isolate non-defective FRU).

**NOTE:** Verify that all attached devices are supported by the computer.

**NOTE:** Verify that the power supply being used at the time of the failure is operating correctly. (See “Power On Issue” on page 112.):

1. Power-off the computer.
2. Visually check them for damage. If any problems are found, replace the FRU.
3. Remove or disconnect all of the following devices:
    - Non-Acer devices
    - Printer, mouse, and other external devices
    - Battery pack
    - Hard disk drive
    - DIMM
    - CD-ROM/Diskette drive Module
    - PC Cards
4. Power-on the computer.
5. Determine if the problem has changed.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the problem remains, replace the following FRU one at a time. Do not replace a non-defective FRU:
    - System board
    - LCD assembly



Downloaded from www.Manualslib.com manuals search engine

# Post Codes

These tables describe the POST codes and descriptions during the POST.

**Post Code Range**

| Phase | POST Code Range |
|---|---|
| SEC | 0x01 - 0x0F |
| PEI | 0x70 - 0x9F |
| DXE | 0x40 - 0x6F |
| BDS | 0x10 - 0x3F |
| SMM | 0xA0 - 0xBF |
| S3 | 0xC0 - 0xCF |
| ASL | 0x51 – 0x55 |
| | 0xE1 – 0xE4 |
| PostBDS | 0xF9 – 0xFE |
| InsydeH2ODDT™ Reserve | 0xD0 – 0xD7 |
| OEM Reserve | 0xE8 – 0xEB |
| Reserved | 0xD8 – 0xE0 |
| | 0xE5 – 0xE7 |
| | 0xEC – 0xF8 |

**SEC Phase POST Code Table**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| SEC_SYSTEM_POWER_ON | SEC | 1 | CPU power on and switch to Protected mode |
| SEC_BEFORE_MICROCODE_PATCH | SEC | 2 | Patching CPU microcode |
| SEC_AFTER_MICROCODE_PATCH | SEC | 3 | Setup Cache as RAM |
| SEC_ACCESS_CSR | SEC | 4 | PCIE MMIO Base Address initial |
| SEC_GENERIC_MSRINIT | SEC | 5 | CPU Generic MSR initialization |
| SEC_CPU_SPEEDCFG | SEC | 6 | Setup CPU speed |
| SEC_SETUP_CAR_OK | SEC | 7 | Cache as RAM test |
| SEC_FORCE_MAX_RATIO | SEC | 8 | Tune CPU frequency ratio to maximum level |
| SEC_GO_TO_SECSTARTUP | SEC | 9 | Setup BIOS ROM cache |
| SEC_GO_TO_PEICORE | SEC | 0A | Enter Boot Firmware Volume |

**PEI Phase POST Code Table:**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| PEI_SIO_INIT | PEI | 70 | Super I/O Initialization |
| PEI_CPU_REG_INIT | PEI | 71 | CPU Early Initialization |
| PEI_PCIE_MMIO_INIT | PEI | 74 | PCIE MMIO BAR Initialization |
| PEI_NB_REG_INIT | PEI | 75 | North Bridge Early Initialization |
| PEI_SB_REG_INIT | PEI | 76 | South Bridge Early Initialization |
| PEI_TPM_INIT | PEI | 78 | TPM Initialization |
| PEI_SMBUS_INIT | PEI | 79 | SMBUS Early Initialization |



Downloaded from www.Manualslib.com manuals search engine

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| PEI_PROGRAM_CLOCK_GEN | PEI | 7A | Clock Generator Initialization |
| PEI_IGD_EARLY_INITIAL | PEI | 7B | Internal Graphic device early Initialization |
| PEI_HECI_INIT | PEI | 7C | HECI Initialization |
| PEI_WATCHDOG_INIT | PEI | 7D | Watchdog timer Initialization |
| PEI_MEMORY_INIT | PEI | 7E | Memory Initial for Normal boot. |
| PEI_MEMORY_INIT_FOR_CRISIS | PEI | 7F | Memory Initial for Crisis Recovery |
| PEI_MEMORY_INSTALL | PEI | 80 | Simple Memory test |
| PEI_TXTPEI | PEI | 81 | TXT function early Initialization |
| PEI_SWITCH_STACK | PEI | 82 | Start to use Memory |
| PEI_MEMORY_CALLBACK | PEI | 83 | Set cache for physical memory |
| PEI_ENTER_RECOVERY_MODE | PEI | 84 | Recovery device Initialization |
| PEI_RECOVERY_MEDIA_FOUND | PEI | 85 | Found Recovery image |
| PEI_RECOVERY_MEDIA_NOT_FOUND | PEI | 86 | Recovery image not found |
| PEI_RECOVERY_LOAD_FILE_DONE | PEI | 87 | Load Recovery Image completed |
| PEI_RECOVERY_START_FLASH | PEI | 88 | Start Flash BIOS with Recovery image |
| PEI_ENTER_DXEIPL | PEI | 89 | Loading BIOS image to RAM |
| PEI_FINDING_DXE_CORE | PEI | 8A | Loading DXE core |
| PEI_GO_TO_DXE_CORE | PEI | 8B | Enter DXE core |

**DXE Phase POST Code Table:**

| Functionality Name (Include\ PostCode.h) | Phase | PostCode | Description |
|---|---|---|---|
| DXE_TCGDXE | DXE | 40 | TPM initial in DXE |
| DXE_SB_SPI_INIT | DXE | 41 | South bridge SPI initialization |
| DXE_CF9_RESET | DXE | 42 | Setup Reset service |
| DXE_SB_SERIAL_GPIO_INIT | DXE | 43 | South bridge Serial GPIO initialization |
| DXE_SMMACCESS | DXE | 44 | Setup SMM ACCE SS service |
| DXE_SIO_INIT | DXE | 46 | Super I/O DXE initialization |
| DXE_LEGACY_REGION | DXE | 47 | Setup Legacy Region service |
| DXE_IDENTIFY_FLASH_DEVICE | DXE | 49 | Identify Flash device |
| DXE_FTW_INIT | DXE | 4A | Fault Tolerant Write verification |
| DXE_VARIABLE_INIT | DXE | 4B | Variable Service initialization |
| DXE_VARIABLE_INIT_FAIL | DXE | 4C | Fail to initial Variable Service |
| DXE_MTC_INIT | DXE | 4D | MTC Initial |
| DXE_CPU_INIT | DXE | 4E | CPU Middle Initialization |
| DXE_MP_CPU_INIT | DXE | 4F | Multi-processor MiddleInitialization |
| DXE_SMBUS_INIT | DXE | 50 | SMBUS Driver Initialization |
| DXE_SMART_TIMER_INIT | DXE | 51 | 8259 Initialization |
| DXE_PCRTC_INIT | DXE | 52 | RTC Initialization |
| DXE_SATA_INIT | DXE | 53 | SATA Controller earlyInitialization |



Downloaded from www.Manualslib.com manuals search engine

| Functionality Name (Include\ PostCode.h) | Phase | PostCode | Description |
|---|---|---|---|
| DXE_SMM_CONTROLER_INIT | DXE | 54 | Setup SMM Control service |
| DXE_LEGACY_INTERRUPT | DXE | 55 | Setup Legacy Interrupt service |
| DXE_RELOCATE_SMBASE | DXE | 56 | Relocate SMM BASE |
| DXE_FIRST_SMI | DXE | 57 | SMI test |
| DXE_VTD_INIT | DXE | 58 | VTD Initial |
| DXE_BEFORE_CSM16_INIT | DXE | 59 | Legacy BIOS Initialization |
| DXE_AFTER_CSM16_INIT | DXE | 5A | Legacy interrupt function Initialization |
| DXE_LOAD_ACPI_TABLE | DXE | 5B | ACPI Table Initialization |
| DXE_SB_DISPATCH | DXE | 5C | Setup SB SMM Dispatcher service |
| DXE_SB_IOTRAP_INIT | DXE | 5D | Setup SB IOTRAP Service |
| DXE_SUBCLASS_DRIVER | DXE | 5E | Build AMT Table |
| DXE_PPM_INIT | DXE | 5F | PPM Initialization |
| DXE_HECIDRV_INIT | DXE | 60 | HECIDRV Initialization |

**BDS Phase POST Code Table:**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| BDS_ENTER_BDS | BDS | 10 | Enter BDS entry |
| BDS_INSTALL_HOTKEY | BDS | 11 | Install Hotkey service |
| BDS_ASF_INIT | BDS | 12 | ASF Initialization |
| BDS_PCI_ENUMERATION_START | BDS | 13 | PCI enumeration |
| BDS_BEFORE_PCIIO_INSTALL | BDS | 14 | PCI resource assign complete |
| BDS_PCI_ENUMERATION_END | BDS | 15 | PCI enumeration complete |
| BDS_CONNECT_CONSOLE_IN | BDS | 16 | Keyboard Controller, Keyboard and Mouse initialization |
| BDS_CONNECT_CONSOLE_OUT | BDS | 17 | Video device initialization |
| BDS_CONNECT_STD_ERR | BDS | 18 | Error report device initialization |
| BDS_CONNECT_USB_HC | BDS | 19 | USB host controller initialization |
| BDS_CONNECT_USB_BUS | BDS | 1A | USB BUS driver initialization |
| BDS_CONNECT_USB_DEVICE | BDS | 1B | USB device driver initialization |
| BDS_NO_CONSOLE_ACTION | BDS | 1C | Console device initial fail |
| BDS_DISPLAY_LOGO_SYSTEM_INFO | BDS | 1D | Display logo or system information |
| BDS_START_IDE_CONTROLLER | BDS | 1E | IDE controller initialization |
| BDS_START_SATA_CONTROLLER | BDS | 1F | SATA controller initialization |
| BDS_START_ISA_ACPI_CONTROLLER | BDS | 20 | SIO controller initialization |
| BDS_START_ISA_BUS | BDS | 21 | ISA BUS driver initialization |
| BDS_START_ISA_FDD | BDS | 22 | Floppy device initialization |
| BDS_START_ISA_SEIRAL | BDS | 23 | Serial device initialization |
| BDS_START_IDE_BUS | BDS | 24 | IDE device initialization |
| BDS_START_AHCI_BUS | BDS | 25 | AHCI device initialization |
| BDS_CONNECT_LEGACY_ROM | BDS | 26 | Dispatch option ROMs |
| BDS_ENUMERATE_ALL_BOOT_OPTION | BDS | 27 | Get boot device information |



Downloaded from www.Manualslib.com manuals search engine

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| BDS_END_OF_BOOT_SELECTION | BDS | 28 | End of boot selection |
| BDS_ENTER_SETUP | BDS | 29 | Enter Setup Menu |
| BDS_ENTER_BOOT_MANAGER | BDS | 2A | Enter Boot manager |
| BDS_BOOT_DEVICE_SELECT | BDS | 2B | Try to boot system to OS |
| BDS_EFI64_SHADOW_ALL_LEGACY_ROM | BDS | 2C | Shadow Misc Option ROM |
| BDS_ACPI_S3SAVE | BDS | 2D | Save S3 resume required data in RAM |
| BDS_READY_TO_BOOT_EVENT | BDS | 2E | Last Chipset initial before boot to OS |
| BDS_GO_LEGACY_BOOT | BDS | 2F | Start to boot Legacy OS |
| BDS_GO_UEFI_BOOT | BDS | 30 | Start to boot UEFI OS |
| BDS_LEGACY16_PREPARE_TO_BOOT | BDS | 31 | Prepare to Boot to Legacy OS |
| BDS_EXIT_BOOT_SERVICES | BDS | 32 | Send END of POST Message to ME via HECI |
| BDS_LEGACY_BOOT_EVENT | BDS | 33 | Last Chipset initial before boot to Legacy OS. |
| BDS_ENTER_LEGACY_16_BOOT | BDS | 34 | Ready to Boot Legacy OS. |
| BDS_RECOVERY_START_FLASH | BDS | 35 | Fast Recovery Start Flash. |

**PostBDS POST Code Table**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| POST_BDS_NO_BOOT_DEVICE | POST_BDS | F9 | No Boot Device |
| POST_BDS_START_IMAGE | POST_BDS | FB | UEFI Boot Start Image |
| POST_BDS_ENTER_INT19 | POST_BDS | FD | Legacy 16 boot entry |
| POST_BDS_JUMP_BOOT_SECTOR | POST_BDS | FE | Try to Boot with INT 19 |

**S3 Functions POST Code Table**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| POST_BDS_NO_BOOT_DEVICE | POST_BDS | F9 | No Boot Device |
| POST_BDS_START_IMAGE | POST_BDS | FB | UEFI Boot Start Image |
| POST_BDS_ENTER_INT19 | POST_BDS | FD | Legacy 16 boot entry |
| POST_BDS_JUMP_BOOT_SECTOR | POST_BDS | FE | Try to Boot with INT 19 |

**ACPI Functions POST Code Table**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| ASL_ENTER_S1 | ASL | 51 | Prepare to enter S1 |
| ASL_ENTER_S3 | ASL | 53 | Prepare to enter S3 |
| ASL_ENTER_S4 | ASL | 54 | Prepare to enter S4 |
| ASL_ENTER_S5 | ASL | 55 | Prepare to enter S5 |
| ASL_WAKEUP_S1 | ASL | E1 | System wakeup from S1 |
| ASL_WAKEUP_S3 | ASL | E3 | System wakeup from S3 |
| ASL_WAKEUP_S4 | ASL | E4 | System wakeup from S4 |



Downloaded from www.Manualslib.com manuals search engine

**SMM Functions POST Code Table**

| Functionality Name (Include\ PostCode.h) | Phase | Post Code | Description |
|---|---|---|---|
| SMM_IDENTIFY_FLASH_DEVICE | SMM | 0xA0 | Identify Flash device in SMM |
| SMM_SMM_PLATFORM_INIT | SMM | 0xA2 | SMM service initial |
| SMM_ACPI_ENABLE_START | SMM | 0xA6 | OS call ACPI enable function |
| SMM_ACPI_ENABLE_END | SMM | 0xA7 | ACPI enable function complete |
| SMM_S1_SLEEP_CALLBACK | SMM | 0xA1 | Enter S1 |
| SMM_S3_SLEEP_CALLBACK | SMM | 0xA3 | Enter S3 |
| SMM_S4_SLEEP_CALLBACK | SMM | 0xA4 | Enter S4 |
| SMM_S5_SLEEP_CALLBACK | SMM | 0xA5 | Enter S5 |
| SMM_ACPI_DISABLE_START | SMM | 0xA8 | OS call ACPI disable function |
| SMM_ACPI_DISABLE_END | SMM | 0xA9 | ACPI disable function complete |

**InsydeH2ODDT Debugger POST Code Table**

| Functionality Name (Include\ PostCode.h) | PostCode | Description |
|---|---|---|
| Used by Insyde debugger | 0x0D | Waiting for device connect |
| Used by Insyde debugger | 0xD0 | Waiting for device connect |
| Used by Insyde debugger | 0xD1 | InsydeH2ODDT Ready |
| Used by Insyde debugger | 0xD2 | EHCI not found |
| Used by Insyde debugger | 0xD3 | Debug port connect low speed device |
| Used by Insyde debugger | 0xD4 | DDT Cable become low speed device |
| Used by Insyde debugger | 0xD5 | DDT Cable Transmission Error (Get descriptor fail) |
| Used by Insyde debugger | 0xD6 | DDT Cable Transmission Error (Set Debug mode fail) |
| Used by Insyde debugger | 0xD7 | DDT Cable Transmission Error (Set address fail) |

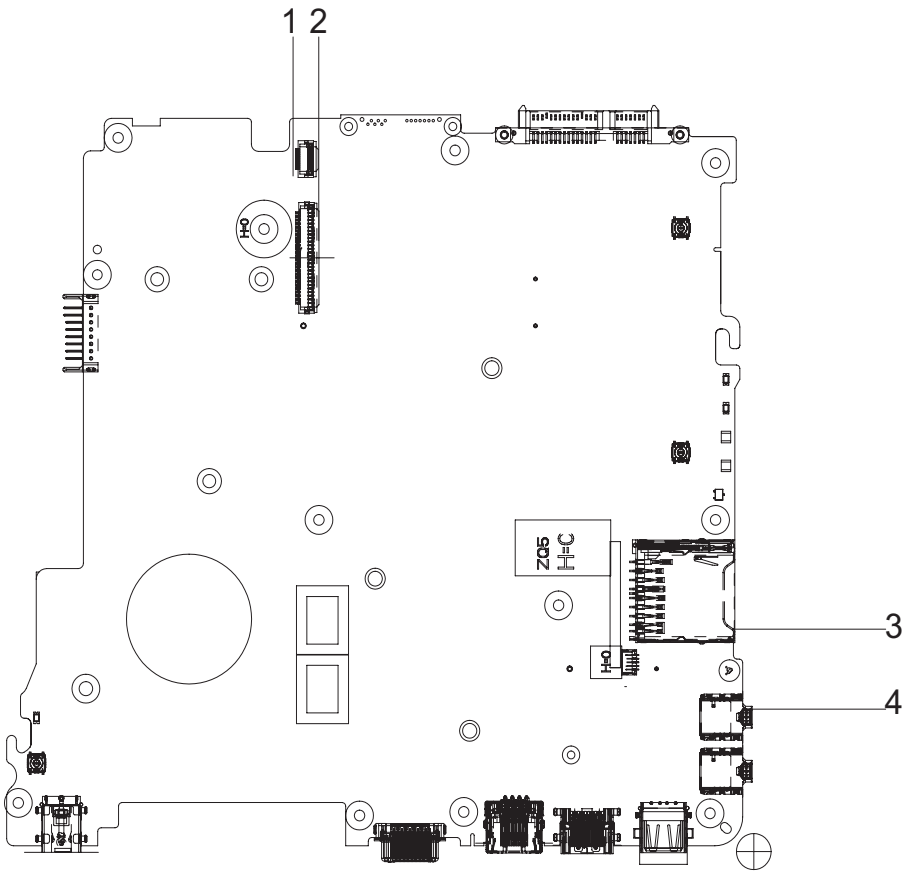


Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

# Jumper and Connector Locations

## Top View

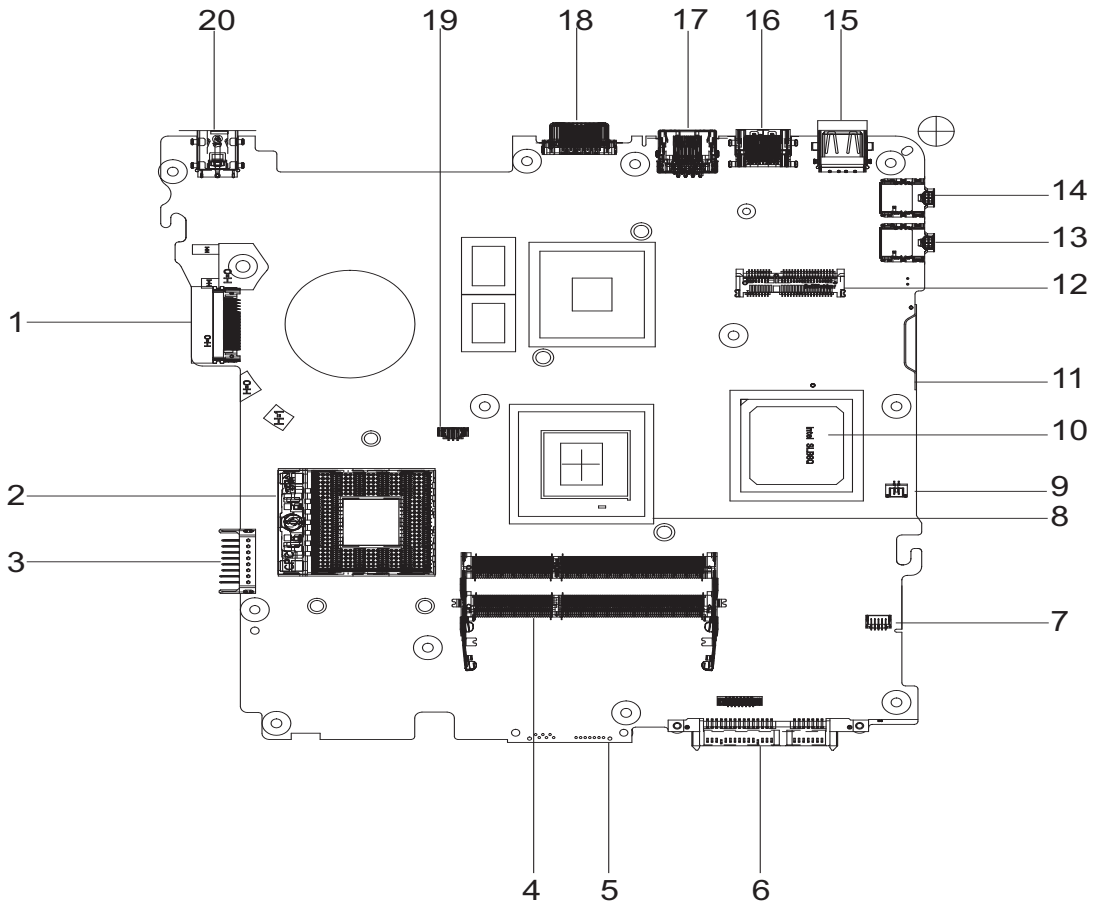



| Item | Description | Item | Description |
|---|---|---|---|
| 1 | CN4 Touchpad | 3 | CN2 Cardreader |
| 2 | CN3 Keyboard | 4 | CN1 Int Mic |



Downloaded from www.Manualslib.com manuals search engine

# Bottom View




| Item | Description | Item | Description |
|---|---|---|---|
| 1 | CN14 LVDS | 11 | CN13 RTC |
| 2 | CPU | 12 | CN15 WLAN |
| 3 | PJ1 Battery | 13 | CN16 Line out |
| 4 | CN9/CN10 DDR3 | 14 | CN17 Mic Ext |
| 5 | CN5 SATA HDD | 15 | CN18 USB |
| 6 | CN6 SATA HDD | 16 | CN21 HDMI |
| 7 | CN8 BT | 17 | CN19 LAN |
| 8 | NB | 18 | CRT CN20 |
| 9 | CN11 SPK | 19 | CN12 Fan |
| 10 | SB | 20 | PJ2 DC Jack |

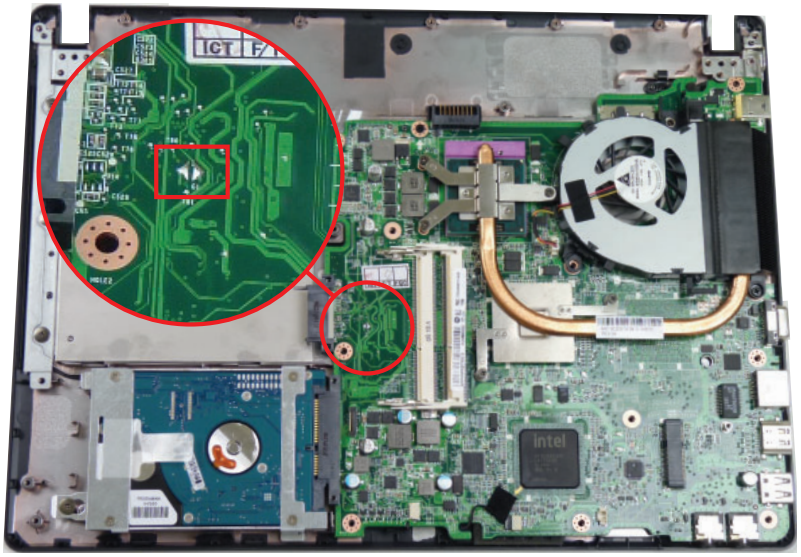


Downloaded from www.Manualslib.com manuals search engine

# Clearing Password Check and BIOS Recovery

This section provide you the standard operating procedures of clearing password and BIOS recovery for Acer Aspire 4333/4733Z. Acer provides one Hardware Open Gap on the mainboard for clearing password check, and one Hotkey for enabling BIOS Recovery.

Hardware Open Gap Description is as follows:



| Item | Description | Location |
|---|---|---|
| G2 / G3 | CMOS Jumper | DIMM bay |

## Steps for Clearing BIOS Password Check

If users set BIOS Password (Supervisor Password and/or User Password) for a security reason, BIOS will ask the password during systems POST or when systems enter to BIOS Setup menu. However, once it is necessary to bypass the password check, users need to short the HW Gap to clear the password by the following steps:

1. Power Off the system, and remove HDD, AC, Battery and DIMMs from the machine.
2. Open the Bottom Cover of the machine and locate the G2 and G3 jumpers.
3. Use an electric conductivity tool to short the two points of the HW Gap.
4. Plug in AC, keep the short condition on the HW Gap, and press Power Button to power on the system until BIOS POST is finished. Then remove the tool from the HW Gap.
5. Restart system. Press **F2** key to enter BIOS Setup menu.
6. If there is no Password request, BIOS Password is cleared. Otherwise, please follow the steps and try again.

**NOTE:** These steps are only for clearing BIOS Password (Supervisor Password and User Password).



Downloaded from www.Manualslib.com manuals search engine

# BIOS Recovery by Crisis Disk

## BIOS Recovery Boot Block:

BIOS Recovery Boot Block is a special block of BIOS. It is used to boot up the system with minimum BIOS initialization. Users can enable this feature to restore the BIOS firmware to a successful one once the previous BIOS flashing process failed.

## BIOS Recovery Hotkey:

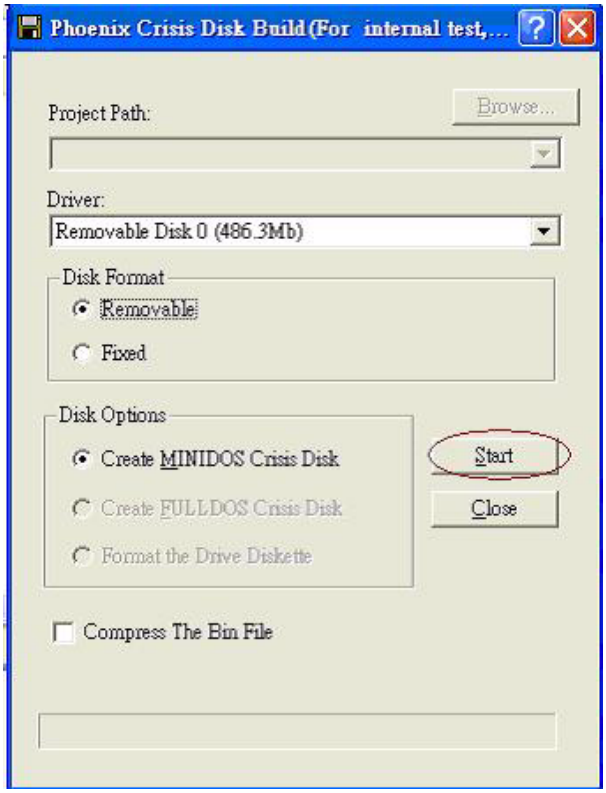
The system provides a function hotkey: **Fn+Esc**, to enable the BIOS Recovery process when the system is powered on during BIOS POST. To use this function, it is strongly recommended to have the AC adapter and Battery present. If this function is enabled, the system will force the BIOS to enter a special BIOS block, called Boot Block.

## Steps for BIOS Recovery from USB Storage:

Before doing this, prepare the Crisis USB key. The Crisis USB key could be made by executing the Crisis Disk program in another system with Windows 7 OS.

Follow the steps below:

1. Insert a USB stick/floppy.
2. Execute WINCRIS.exe and click **Start** to create the crisis disk.




3. Plug USB storage into USB port of the system that needs to be rescued.
4. Press **Fn + ESC** and the power button to power on the system.
5. The system will go into crisis mode and recover BIOS.



Downloaded from www.Manualslib.com manuals search engine

Chapter 6

# FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of Acer Aspire 4333/4733Z. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

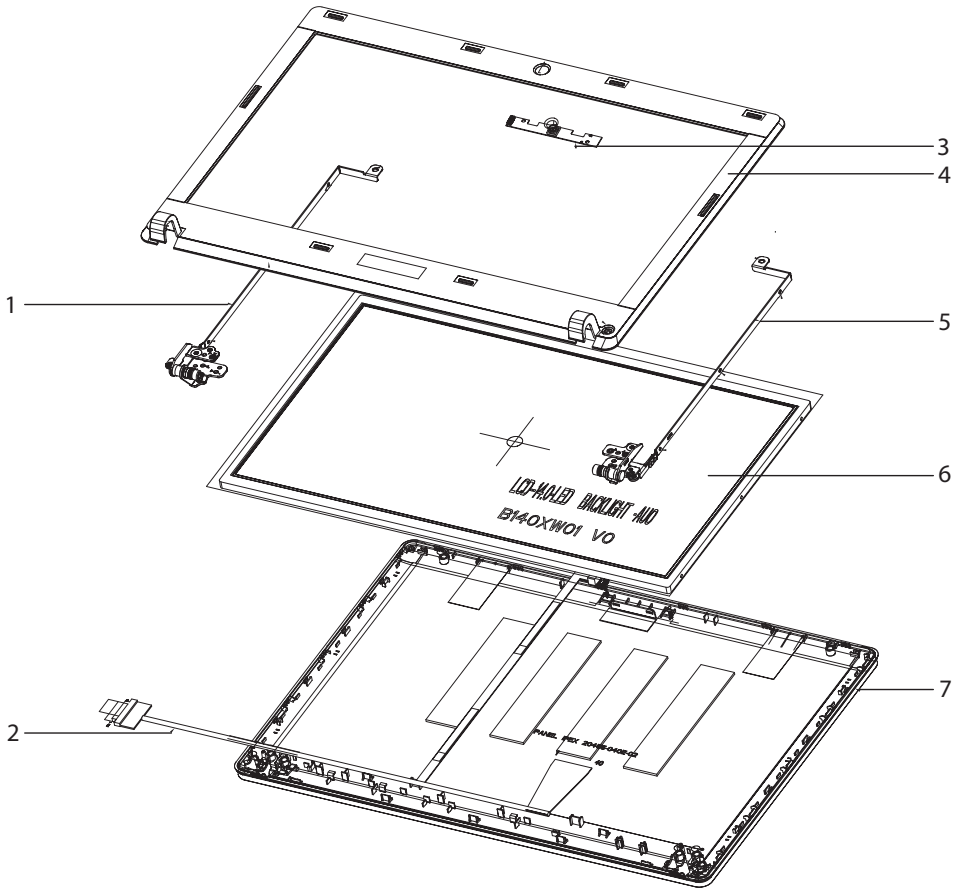
NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.



Downloaded from www.Manualslib.com manuals search engine

# Acer Aspire 4333/4733Z Exploded Diagrams

## LCD Assembly

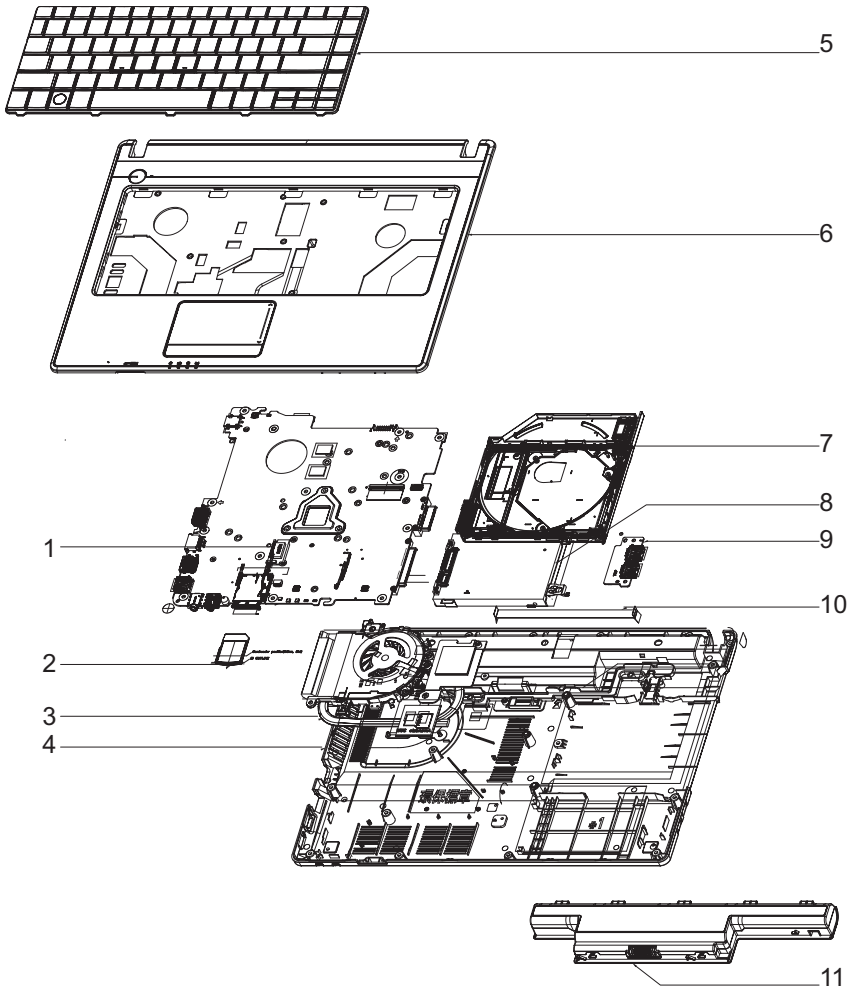



| No. | Description | Acer P/N |
|---|---|---|
| 1 | Left hinge | 33.R6Z07.004 |
| 2 | LVDS cable assy | 50.R6Z07.004 |
| 3 | Camera | AM.21400.067 |
| 4 | LCD bezel | 60.NBG07.004 |
| 5 | Right hinge | 33.R6Z07.005 |
| 6 | LCD Panel | LK.14008.004 |
| 7 | LCD cover | 60.NBG07.003 |



Downloaded from www.Manualslib.com manuals search engine

# Chassis Assembly




| No. | Description | Acer P/N | No. | Description | Acer P/N |
|---|---|---|---|---|---|
| 1 | Bluetooth module | BH.21100.008 | 7 | ODD | 6M.R6Z07.001 |
| 2 | Dummy card | 42.PSR07.002 | 8 | HDD | KH.16001.045 |
| 3 | Thermal module | 60.R6Z07.013 | 9 | USB board | 55.R6Z07.001 |
| 4 | Base assy | 60.R6Z07.007 | 10 | USB FFC | 50.R6Z07.001 |
| 5 | Keyboard | KB.I140A.204 | 11 | Battery | BT.00603.111 |
| 6 | Upper cover | 60.R6Z07.001 | | | |



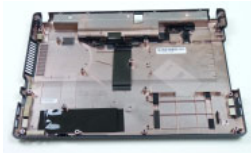
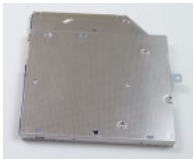
Downloaded from www.Manualslib.com manuals search engine

# Acer Aspire 4333/4733Z FRU List

| Category | Description | P/N |
|---|---|---|
| **ADAPTER** | | |
| | Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF | AP.06501.026 |
| | Adapter LITE-ON 65W 19V 1.7x5.5x11 Yellow PA-1650-22AC LV5 LED LF | AP.06503.024 |
| | Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF | AP.0650A.012 |
| | Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65VH BA, LV5, Low profile LED LF | AP.06501.033 |
| | Adapter LITE-ON 65W 19V 1.7x5.5x11 Yellow PA-1650-69AW, LV5, Low profile LED LF | AP.06503.029 |
| | Adapter Chicony Power 65W 19V 1.7x5.5x11 Yellow CPA09-A065N1, LV5, low profile LED LF | AP.0650A.017 |
| **BATTERY** | | |
| | Battery SANYO AS10D Li-Ion 3S2P SANYO 6 cell 4400mAh Main COMMON ID:AS10D31 | BT.00603.111 |
| | Battery SONY AS10D Li-Ion 3S2P SONY 6 cell 4400mAh Main COMMON ID:AS10D41 | BT.00604.049 |
| | Battery PANASONIC AS10D Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON ID:AS10D51 | BT.00605.062 |
| | Battery SIMPLO AS10D Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON ID:AS10D71 | BT.00607.125 |
| | Battery SIMPLO AS10D Li-Ion 3S2P LGC 6 cell 4400mAh Main COMMON ID:AS10D73 | BT.00607.126 |
| | Battery SIMPLO AS10D Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON ID:AS10D | BT.00607.127 |
| **BOARD** | | |
| | Foxconn Wirelss LAN Atheros HB95BG (HM) T77H121.10 | NI.23600.077 |
| | Liteon Wireless LAN Atheris HB97 2x2 BGN (HM) WN6603AH | NI.23600.073 |
| | Foxconn Wireless LAN Atheros HB97 2x2 BGN (HM) | NI.23600.072 |
| | Foxconn Wireless LAN Broadcomm 43225 2x2 BGN (HM) T77H103.00 | NI.23600.066 |
| | Foxconn Bluetooth BRM 2046 BT3.0 (T60H928.33) f/w:861 | BH.21100.008 |
| | Foxconn Bluetooth ATH AR3011 (BT3.0) | BH.21100.009 |
| | Foxconn Bluetooth BRM 2070 (T77H114.01) BT 3.0 | BH.21100.010 |
| | Foxconn Bluetooth BRM 2070 (T77H114.01) | BH.21100.007 |
| | USB BOARD | 55.R6Z07.001 |
| **CABLE** | | |
| | POWER CORD US 3PIN ROHS | 27.TAXV7.001 |
| | PWR CORD(ISR)1.8M 3PBLK FZ0I0008-038 | 27.TATV7.005 |
| | PWR CORD V50CB3T3012180QD TW-110V,3P | 27.A99V7.002 |
| | POWER CORD(SWI)1.8M 3PBLACK FZ010008-011 | 27.A99V7.004 |
| | POWER CORD(IT) 1.8M 3PBLACK FZ010008-008 | 27.A99V7.005 |
| | POWER CORD(S.A) 1.8M 3BLACK FZ010008-006 | 27.T48V7.001 |
| | POWER CORD(EU) 1.8M 3PBLACK FM010008-010 | 27.TATV7.001 |
| | POWER CORD BRAZIL IMETRO 3 PIN | 27.S0607.001 |
| | PWR CORD V943B30001218008 DANISH 3P | 27.A03V7.006 |



Downloaded from www.Manualslib.com manuals search engine

| Category | Description | P/N |
|---|---|---|
| | BLUETOOTH CABLE (6P FOR BT3.0 BRM2070) | 50.TVM07.002 |
| | BLUETOOTH CABLE | 50.PSR07.001 |
| | FFC- USB | 50.R6Z07.001 |
| **CASE/COVER/BRACKET ASSEMBLY** | | |
| | UPPER CASE W/ SPK,TP, TP FFC - BLACK | 60.R6Z07.001 |
| | UPPER CASE W/O SPK,TP,TP FFC - BLACK | 60.R6Z07.004 |
| | TOUCH PAD | 56.R6Z07.001 |
| | FFC- TP TO MB | 50.R6Z07.003 |
| | UPPER CASE W/ SPK,TP, TP FFC - BROWN | 60.R6Z07.002 |
| | UPPER CASE W/O SPK,TP,TP FFC - BROWN | 60.R6Z07.005 |
| | TOUCH PAD | 56.R6Z07.001 |
| | FFC- TP TO MB | 50.R6Z07.003 |
| | UPPER CASE W/ SPK,TP, TP FFC - RED | 60.R6Z07.003 |
| | UPPER CASE W/O SPK,TP,TP FFC - RED | 60.R6Z07.006 |
| | TOUCH PAD | 56.R6Z07.001 |
| | FFC- TP TO MB | 50.R6Z07.003 |
|  | LOWER CASE | 60.R6Z07.007 |
| | HINGE SUPPORT BRACKET FOR UPPER CASE | 33.R6Z07.001 |
| | DUMMY CARD | 42.PSR07.002 |
| **CPU/PROCESSOR** | | |
| | CPU Intel Celeron 900 PGA 2.2G 1M 800 35W | KC.N0001.900 |
| | CPU Intel Celeron T3500 PGA 2.1G 1M 800 35W | KC.35001.CMT |
| **DVD RW DRIVE** | | |
|  | DVD/RW SUPER MULTI SATA MODULE | 6M.R6Z07.001 |
| | ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633F LF W/O bezel SATA (HF + Windows 7) | KU.00801.040 |
| | ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT32N (R5-2) LF W/O bezel SATA with Renesas solution + PCC LD (HF + Windows 7) | KU.0080D.055 |
| | ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A5SH LF+HF W/O bezel SATA With TI + Rohm Solution (HF + Windows 7) | KU.0080F.014 |
| | ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7585H LF W/O bezel SATA (HF + Windows 7) | KU.0080E.027 |
| | ODD BEZEL - SUPER MULTI | 60.R6Z07.008 |
| | ODD BRACKET | 33.PUM07.001 |



Downloaded from www.Manualslib.com manuals search engine

| Category | Description | P/N |
|---|---|---|
| **HDD/HARD DISK DRIVE** | | |
| | HDD SEAGATE 2.5" 5400rpm 160GB ST9160314AS,9HH13C-189, Seagate(new pcb) SATA 8MB LF F/W:0001SDM1 | KH.16001.045 |
| | HDD HGST 2.5" 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.16007.026 |
| | HDD TOSHIBA 2.5" 5400rpm 160GB MK1665GSX, Capricorn BS, 320G/P SATA 8MB LF F/W:GJ001J | KH.16004.008 |
| | HDD WD 2.5" 5400rpm 160GB WD1600BEVT-22A23T0 , WD, ML320S SATA 8MB LF F/W:01.01A01 | KH.16008.027 |
| | HDD TOSHIBA 2.5" 5400rpm 250GB MK2565GSX, Capricorn BS, 320G/P SATA 8MB LF F/W:GJ001J | KH.25004.005 |
| | HDD HGST 2.5" 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.25007.016 |
| | HDD SEAGATE 2.5" 5400rpm 250GB ST9250315AS, 9HH132-189, Wyatt with new pcb SATA 8MB LF F/W:0001SDM1 | KH.25001.019 |
| | HDD WD 2.5" 5400rpm 250GB WD2500BEVT-22A23T0, WD, ML320S SATA 8MB LF F/W:01.01A01. | KH.25008.025 |
| | HDD TOSHIBA 2.5" 5400rpm 320GB Capricorn BS ,MK3265GSX SATA 8MB LF F/W:GJ001J | KH.32004.004 |
| | HDD HGST 2.5" 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.32007.008 |
| | HDD WD 2.5" 5400rpm 320GB WD3200BPVT-22ZEST0, ML320S, 4K drive SATA 8MB LF F/W: 01.01A01 | KH.32008.022 |
| | HDD SEAGATE 2.5" 5400rpm 320GB ST9320310AS,9RN132-188, Cameron 320G/P SATA 8MB LF F/W:0001SDM1 | KH.32001.019 |
| | HDD TOSHIBA 2.5" 5400rpm 500GB MK5065GSX,Capricorn BS, 320G/P SATA 8MB LF F/W:GJ001J | KH.50004.002 |
| | HDD HGST 2.5" 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.50007.010 |
| | HDD WD 2.5" 5400rpm 500GB WD5000BEVT-22A0RT0, ML320M,WD SATA 8MB LF F/W:01.01A01 | KH.50008.017 |
| | HDD SEAGATE 2.5" 5400rpm 500GB ST9500325AS,9HH134-189, Wyatt with new pcb SATA 8MB LF F/W:0001SDM1 | KH.50001.017 |
| | HDD WD 2.5" 5400rpm 640GB WD6400BEVT-22A0RT0, ML320 SATA 8MB LF F/W:01.01A01 | KH.64008.004 |
| | HDD TOSHIBA 2.5" 5400rpm 640GB MK6465GSX,Capricorn BS,320G/P SATA 8MB LF F/W:GJ002J | KH.64004.001 |
| | HDD WD 2.5" 5400rpm 750GB WD7500BPVT-22HXZT1, ML375M, 4K drive SATA 8MB LF F/W:01.01A01 | KH.75008.009 |
| | HDD SEAGATE 2.5" 5400rpm 250GB ST92503010AS, Sapta 1, 7mmZH, 250G/P SATA 8MB LF F/W:0001SDM1 | KH.25001.018 |
| | HDD BRACKET | 33.R6Z07.002 |
| | HDD FRONT BRACKET | 33.R6Z07.003 |



Downloaded from www.Manualslib.com manuals search engine

| Category | Description | P/N |
|---|---|---|
| **KEYBOARD** | | |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black Arabic Texture | KB.I140A.204 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Belgium Texture | KB.I140A.205 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Brazilian Portuguese Texture | KB.I140A.206 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black CZ/SK Texture | KB.I140A.207 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black Chinese Texture | KB.I140A.208 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Danish Texture | KB.I140A.209 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black FR/Arabic Texture | KB.I140A.210 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black French Texture | KB.I140A.211 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black German Texture | KB.I140A.212 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black Greek Texture | KB.I140A.213 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Hungarian Texture | KB.I140A.214 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Italian Texture | KB.I140A.215 |
| | Keyboard ACER AC4T_A10B AC4T 91KS Black Japanese Texture | KB.I140A.216 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black Korean Texture | KB.I140A.217 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Nordic Texture | KB.I140A.218 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Norwegian Texture | KB.I140A.219 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Portuguese Texture | KB.I140A.220 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black Russian Texture | KB.I140A.221 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black SLO/CRO Texture | KB.I140A.222 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Spanish Texture | KB.I140A.223 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Sweden Texture | KB.I140A.224 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Swiss/G Texture | KB.I140A.225 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black Thailand Texture | KB.I140A.226 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black Turkish Texture | KB.I140A.227 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black UK Texture | KB.I140A.228 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black US International Texture | KB.I140A.229 |
| | Keyboard ACER AC4T_A10B AC4T 86KS Black US International w/ Hebrew Texture | KB.I140A.230 |
| | Keyboard ACER AC4T_A10B AC4T 87KS Black US w/ Canadian French Texture | KB.I140A.231 |
| **LCD** | | |
| | LCD MODULE 14" LED GLARE IMR W/CCD, ANTENNA*2 - BLACK | 6M.R6Z07.002 |
| | LED LCD LPL 14" WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1 | LK.14008.004 |
| | LED LCD SAMSUNG 14" WXGA Glare LTN140AT01-G03 LF 220nit 8ms 500:1 | LK.14006.011 |
| | LED LCD AUO 14" WXGA Glare B140XW01 V8 0A LF 220nit 8ms 500:1 (power saving) | LK.14005.010 |
| | LED LCD CMI 14" WXGA Glare BT140GW01 V6 LF 220nit 8ms 600:1 | LK.1400D.008 |



Downloaded from www.Manualslib.com manuals search engine

| Category | Description | P/N |
|---|---|---|
| | LCD COVER W/ ANT - IMR BLACK | 60.R6Z07.009 |
| | ANTENNA - WIMAX | 50.R6Z07.002 |
| | LCD BEZEL FOR CCD | 60.R6Z07.010 |
| | LCD BRACKET W/ HINGE - L | 33.R6Z07.004 |
| | LCD BRACKET W/ HINGE - R | 33.R6Z07.005 |
| | LCD CABLE | 50.R6Z07.004 |
| | Chicony 1.3M CH9665SN (CNF9157) | AM.21400.067 |
| | Suyin 1.3M SY9665SN | AM.21400.068 |
| | Liteon 1.3M LT9665AL (09P2SF119) | AM.21400.069 |
| **LCD** | | |
| | LCD MODULE 14" LED GLARE IMR W/CCD, ANTENNA*2 - BROWN | 6M.R6Z07.003 |
| | LED LCD LPL 14" WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1 | LK.14008.004 |
| | LED LCD SAMSUNG 14" WXGA Glare LTN140AT01-G03 LF 220nit 8ms 500:1 | LK.14006.011 |
| | LED LCD AUO 14" WXGA Glare B140XW01 V8 0A LF 220nit 8ms 500:1 (power saving) | LK.14005.010 |
| | LED LCD CMI 14" WXGA Glare BT140GW01 V6 LF 220nit 8ms 600:1 | LK.1400D.008 |
| | LCD COVER W/ ANT - IMR BROWN | 60.R6Z07.011 |
| | ANTENNA - WIMAX | 50.R6Z07.002 |
| | LCD BEZEL FOR CCD | 60.R6Z07.010 |
| | LCD BRACKET W/ HINGE - L | 33.R6Z07.004 |
| | LCD BRACKET W/ HINGE - R | 33.R6Z07.005 |
| | LCD CABLE | 50.R6Z07.004 |
| | Chicony 1.3M CH9665SN (CNF9157) | AM.21400.067 |
| | Suyin 1.3M SY9665SN | AM.21400.068 |
| | Liteon 1.3M LT9665AL (09P2SF119) | AM.21400.069 |



Downloaded from www.Manualslib.com manuals search engine

| Category | Description | P/N |
|---|---|---|
| **LCD** | | |
| | LCD MODULE 14" LED GLARE IMR W/CCD, ANTENNA*2 - RED | 6M.R6Z07.004 |
| | LED LCD LPL 14" WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1 | LK.14008.004 |
| | LED LCD SAMSUNG 14" WXGA Glare LTN140AT01-G03 LF 220nit 8ms 500:1 | LK.14006.011 |
| | LED LCD AUO 14" WXGA Glare B140XW01 V8 0A LF 220nit 8ms 500:1 (power saving) | LK.14005.010 |
| | LED LCD CMI 14" WXGA Glare BT140GW01 V6 LF 220nit 8ms 600:1 | LK.1400D.008 |
| | LCD COVER W/ ANT - IMR RED | 60.R6Z07.012 |
| | ANTENNA - WIMAX | 50.R6Z07.002 |
| | LCD BEZEL FOR CCD | 60.R6Z07.010 |
| | LCD BRACKET W/ HINGE - L | 33.R6Z07.004 |
| | LCD BRACKET W/ HINGE - R | 33.R6Z07.005 |
| | LCD CABLE | 50.R6Z07.004 |
| | Chicony 1.3M CH9665SN (CNF9157) | AM.21400.067 |
| | Suyin 1.3M SY9665SN | AM.21400.068 |
| | Liteon 1.3M LT9665AL (09P2SF119) | AM.21400.069 |
| **MAINBOARD** | | |
| | MAIN BOARD UMA GL40, W/CARD READER,MIC | MB.R5U06.001 |
| **MEMORY** | | |
| | Memory ELPIDA SO-DIMM DDRIII 1333 1GB EBJ10UE8BDS0-DJ-F LF 128*8 0.065um | KN.1GB09.015 |
| | Memory SAMSUNG SO-DIMM DDRIII 1333 1GB M471B2873FHS-CH9 LF 128*8 46nm | KN.1GB0B.035 |
| | Memory HYNIX SO-DIMM DDRIII 1333 1GB HMT112S6TFR8C-H9 LF 128*8 0.055um | KN.1GB0G.026 |
| | Memory KINGSTON SO-DIMM DDRIII 1333 1GB ACR128X64D3S1333C9 LF 128*8 0.065um | KN.1GB07.004 |
| | Memory KINGSTON SO-DIMM DDRIII 1333 2GB ACR256X64D3S1333C9 LF 128*8 0.065um | KN.2GB07.004 |
| | Memory ELPIDA SO-DIMM DDRIII 1333 2GB EBJ21UE8BFU0-DJ-F LF 128*8 0.065um | KN.2GB09.009 |
| | Memory SAMSUNG SO-DIMM DDRIII 1333 2GB M471B5673FH0-CH9 LF 128*8 46nm | KN.2GB0B.023 |



Downloaded from www.Manualslib.com manuals search engine

| Category | Description | P/N |
|---|---|---|
| | Memory SAMSUNG SO-DIMM DDRIII 1333 2GB M471B5773CHS-CH9 LF 256*8 46nm | KN.2GB0B.026 |
| | Memory HYNIX SO-DIMM DDRIII 1333 2GB HMT125S6TFR8C-H9 LF 128*8 0.055um | KN.2GB0G.016 |
| **HEATSINK** | | |
| | THERMAL MODULE 35W UMA | 60.R6Z07.013 |
| **SPEAKER** | | |
| | SPEAKER | 23.R6Z07.001 |
| **MISCELLANEOUS** | | |
| | RUBBER FOOT - REAR | 47.PSR07.003 |
| | LOWER CASE RUBBER FOOT - F | 47.PSR07.001 |
| | LCD RUBBER - UP | 47.R6Z07.001 |
| | LCD RUBBER - MID | 47.R6Z07.002 |
| | LCD SCREW MYLAR | 47.R6Z07.003 |
| | TP PROTECT MYLAR | 47.R6Z07.004 |

# Screw List

| Category | Description | P/N |
|---|---|---|
| **SCREW** | | |
| | SCREW M2-0.4*2-I(BNI)(NYLOK)IRON | 86.W4107.002 |
| | SCREW M2.0*3.0-I(BKAG)(NYLOK IRON | 86.ARE07.002 |
| | SCREW M3*0.5+3.5I | 86.N1407.007 |
| | SCREW M2.5*4.0-I(NI)(NYLOK) | 86.R6Z07.001 |
| | SCREW M2.0*5-I(NI)(NYLOK) | 86.T23V7.010 |
| | SCREW M2.0*3.95-I(BNI)(NYLOK) | 86.R6Z07.002 |
| | SCREW M2.5*6.5-I(BZN(NYLOK-RED) | 86.ARE07.001 |
| | SCREW M2.5*4.0-I(BKAG)(NYLOK)IRON | 86.PSR07.001 |



Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

# Model Definition and Configuration

## Aspire 4333

| Model | RO | Country | Acer Part No | Description |
|---|---|---|---|---|
| AS4333-901G32Mncc | EMEA | Middle East | LX.R6Z08.001 | AS4333-901G32Mncc EM W7ST32EMASME2 MC UMACcc_3 1*1G/320/BT/6L2.2/2R/CB_bgn_1.3C_HG_ARA1 |
| AS4333-901G32Mnkk | EMEA | Middle East | LX.R5U08.002 | AS4333-901G32Mnkk EM W7ST32EMASME2 MC UMACkk_3 1*1G/320/BT/6L2.2/2R/CB_bgn_1.3C_HG_ARA1 |
| AS4333-901G32Mnrr | EMEA | Middle East | LX.R7108.001 | AS4333-901G32Mnrr EM W7ST32EMASME2 MC UMACrr_3 1*1G/320/BT/6L2.2/2R/CB_bgn_1.3C_HG_ARA1 |
| AS4333-902G25Mnkk | EMEA | Spain | LX.R5U02.006 | AS4333-902G25Mnkk W7HP64ASES1 MC UMACkk_3 1*2G/250/6L2.2/2R/CB_bgn_1.3C_HG_ES51 |
| AS4333-902G25Mnkk | WW | WW | S2.R5U02.002 | AS4333-902G25Mnkk W7HP64ASWW1 MC UMACkk_3 2*1G/250/BT/6L2.2/2R/CB_bgn_1.3C_HG_ES62 |
| AS4333-902G50Mnkk | EMEA | Spain | LX.R5U02.005 | AS4333-902G50Mnkk W7HP64ASES1 MC UMACkk_3 1*2G/500_L/6L2.2/2R/CB_bgn_1.3C_HG_ES51 |
| AS4333-906G50Mnrr | WW | GCTWN | S2.R7102.001 | AS4333-906G50Mnrr W7HP64ASWW1 MC UMACrr_3 2G+4G/500_L/BT/6L2.2/2R/CB_bgn_1.3C_HG_ES61 |
| AS4333-908G50Mncc | WW | GCTWN | S2.R6Z02.001 | AS4333-908G50Mncc W7HP64ASWW1 MC UMACcc_3 2*4G/500_L/BT/6L2.2/2R/CB_bgn_1.3C_HG_ES61 |
| AS4333-T352G25Mnkk | AAP | Singapore | LX.R5U02.002 | AS4333-T352G25Mnkk W7HP64ASSG1 MC UMACkk_3 1*2G/250/BT/6L2.2/2R/CB_bgn_1.3C_HG_ZH31 |
| AS4333-T352G25Mnkk | AAP | Singapore | LX.R5U02.001 | AS4333-T352G25Mnkk W7HP64ASSG1 MC UMACkk_3 1*2G/250/BT/6L2.2/2R/CB_bgn_1.3C_HG_ES61 |
| AS4333-T352G32Mnkk | AAP | Singapore | LX.R5U02.004 | AS4333-T352G32Mnkk W7HP64ASSG1 MC UMACkk_3 1*2G/320/BT/6L2.2/2R/CB_bgn_1.3C_HG_ZH31 |
| AS4333-T352G32Mnkk | AAP | Singapore | LX.R5U02.003 | AS4333-T352G32Mnkk W7HP64ASSG1 MC UMACkk_3 1*2G/320/BT/6L2.2/2R/CB_bgn_1.3C_HG_ES61 |
| AS4333-T352G32Mnkk | PA | ACLA-Spain | LX.R5U08.001 | AS4333-T352G32Mnkk EM W7ST32EMASEA1 MC UMACkk_3 1*2G/320/6L2.2/2R/CB_bgn_1.3C_HG_ES51 |
| AS4333-T352G32Mnkk | PA | ACLA-Spain | LX.R5U0C.003 | AS4333-T352G32Mnkk LINPUS MAEA4 UMACkk_3 1*2G/320/6L2.2/2R/CB_bgn_1.3C_HG_XS31 |



Downloaded from www.Manualslib.com manuals search engine

| Model | RO | Country | Acer Part No | Description |
|---|---|---|---|---|
| AS4333-T352G32Mnkk | PA | ACLA-Spain | LX.R5U0C.002 | AS4333-T352G32Mnkk LINPUS MAEA1 UMACkk_3 1*2G/320/6L2.2/2R/ CB_bgn_1.3C_HG_XS41 |
| AS4333-T352G32Mnkk | PA | ACLA-Spain | LX.R5U0C.001 | AS4333-T352G32Mnkk LINPUS MAEA3 UMACkk_3 1*2G/320/6L2.2/2R/ CB_bgn_1.3C_HG_XS41 |
| AS4333-T352G32Mnkk | PA | Chile | LX.R5U0C.004 | AS4333-T352G32Mnkk LINPUS MACL3 UMACkk_3 1*2G/320/6L2.2/2R/ CB_bgn_1.3C_HG_XS41 |
| AS4333-T354G32Mnkk | WW | WW | S2.R5U02.003 | AS4333-T354G32Mnkk W7HP64ASWW1 MC UMACkk_3 2*2G/320/BT/6L2.2/2R/ CB_bgn_1.3C_HG_ES62 |
| AS4333-T354G50Mnkk | WW | WW | S2.R5U02.001 | AS4333-T354G50Mnkk W7HP64ASWW1 MC UMACkk_3 2*2G/500_L/BT/6L2.2/2R/ CB_bgn_1.3C_HG_ES62 |

| Model | Country | Acer Part No | CPU | Memory 1 | Memory 2 | HDD 1(GB) |
|---|---|---|---|---|---|---|
| AS4333-901G32Mncc | Middle East | LX.R6Z08.001 | CM900 | SO1GBIII10 | N | N320GB5.4KS_4K |
| AS4333-901G32Mnkk | Middle East | LX.R5U08.002 | CM900 | SO1GBIII10 | N | N320GB5.4KS_4K |
| AS4333-901G32Mnrr | Middle East | LX.R7108.001 | CM900 | SO1GBIII10 | N | N320GB5.4KS_4K |
| AS4333-902G25Mnkk | Spain | LX.R5U02.006 | CM900 | SO2GBIII10 | N | N250GB5.4KS |
| AS4333-902G25Mnkk | WW | S2.R5U02.002 | CM900 | SO1GBIII10 | SO1GBIII10 | N250GB5.4KS |
| AS4333-902G50Mnkk | Spain | LX.R5U02.005 | CM900 | SO2GBIII10 | N | N500GB5.4KS |
| AS4333-906G50Mnrr | GCTWN | S2.R7102.001 | CM900 | SO2GBIII10 | SO4GBIII10 | N500GB5.4KS |
| AS4333-908G50Mncc | GCTWN | S2.R6Z02.001 | CM900 | SO4GBIII10 | SO4GBIII10 | N500GB5.4KS |
| AS4333-T352G25Mnkk | Singapore | LX.R5U02.002 | CMT3500 | SO2GBIII10 | N | N250GB5.4KS |
| AS4333-T352G25Mnkk | Singapore | LX.R5U02.001 | CMT3500 | SO2GBIII10 | N | N250GB5.4KS |
| AS4333-T352G32Mnkk | Singapore | LX.R5U02.004 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4333-T352G32Mnkk | Singapore | LX.R5U02.003 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4333-T352G32Mnkk | ACLA-Spain | LX.R5U08.001 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS_4K |
| AS4333-T352G32Mnkk | ACLA-Spain | LX.R5U0C.003 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4333-T352G32Mnkk | ACLA-Spain | LX.R5U0C.002 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS |



Downloaded from www.Manualslib.com manuals search engine

| Model | Country | Acer Part No | CPU | Memory 1 | Memory 2 | HDD 1(GB) |
|---|---|---|---|---|---|---|
| AS4333-T352G32Mnkk | ACLA-Spain | LX.R5U0C.001 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4333-T352G32Mnkk | Chile | LX.R5U0C.004 | CMT3500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4333-T354G32Mnkk | WW | S2.R5U02.003 | CMT3500 | SO2GBIII10 | SO2GBIII10 | N320GB5.4KS_4K |
| AS4333-T354G50Mnkk | WW | S2.R5U02.001 | CMT3500 | SO2GBIII10 | SO2GBIII10 | N500GB5.4KS |

## Aspire 4733Z

| Model | RO | Country | Acer Part No | Description |
|---|---|---|---|---|
| AS4733Z-452G25Mncc | WW | GCTWN | S2.R8902.001 | AS4733Z-452G25Mncc W7HP64ASWW1 MC UMACcc_3 1*2G/250/BT/6L2.2/2R/ CB_bgn_1.3C_GEc_ES61 |
| AS4733Z-452G25Mncc | WW | WW | S2.R8902.002 | AS4733Z-452G25Mncc W7HP64ASWW1 MC UMACcc_3 1*2G/250/BT/6L2.2/2R/ CB_bgn_1.3C_GEc_ES62 |
| AS4733Z-452G32Mncc | CHINA | China | LX.R890C.001 | AS4733Z-452G32Mncc LINPUS MACN1 UMACcc_3 1*2G/320/6L2.2/2R/ CB_bgn_1.3C_GEc_ZH41 |
| AS4733Z-452G32Mnkk | CHINA | China | LX.R5T0C.001 | AS4733Z-452G32Mnkk LINPUS MACN1 UMACkk_3 1*2G/320/6L2.2/2R/ CB_bgn_1.3C_GEk_ZH41 |
| AS4733Z-452G32Mnrr | CHINA | China | LX.R8A0C.001 | AS4733Z-452G32Mnrr LINPUS MACN1 UMACrr_3 1*2G/320/6L2.2/2R/ CB_bgn_1.3C_GEr_ZH41 |
| AS4733Z-452G50Mnkk | WW | GCTWN | S2.R5T02.001 | AS4733Z-452G50Mnkk W7HP64ASWW1 MC UMACkk_3 1*2G/500_L/BT/6L2.2/2R/ CB_bgn_1.3C_GEk_ES61 |
| AS4733Z-452G50Mnkk | WW | WW | S2.R5T02.002 | AS4733Z-452G50Mnkk W7HP64ASWW1 MC UMACkk_3 1*2G/500_L/BT/6L2.2/2R/ CB_bgn_1.3C_GEk_ES62 |
| AS4733Z-453G64Mnrr | WW | WW | S2.R8A0C.001 | AS4733Z-453G64Mnrr LINPUS MAWW1 UMACrr_3 1G+2G/640/6L2.2/2R/ CB_bgn_1.3C_GEr_ES61 |
| AS4733Z-454G32Mnrr | WW | GCTWN | S2.R8A02.001 | AS4733Z-454G32Mnrr W7HP64ASWW1 MC UMACrr_3 2*2G/320/BT/6L2.2/2R/ CB_bgn_1.3C_GEr_ES61 |
| AS4733Z-454G32Mnrr | WW | WW | S2.R8A02.002 | AS4733Z-454G32Mnrr W7HP64ASWW1 MC UMACrr_3 2*2G/320_5.4k_4k/BT/6L2.2/2R/ CB_bgn_1.3C_GEr_ES62 |

| Model | Country | Acer Part No | CPU | Memory 1 | Memory 2 | HDD 1(GB) |
|---|---|---|---|---|---|---|
| AS4733Z-452G25Mncc | GCTWN | S2.R8902.001 | PMDT4500 | SO2GBIII10 | N | N250GB5.4KS |



Downloaded from www.Manualslib.com manuals search engine

| Model | Country | Acer Part No | CPU | Memory 1 | Memory 2 | HDD 1(GB) |
|---|---|---|---|---|---|---|
| AS4733Z-452G25Mncc | WW | S2.R8902.002 | PMDT4500 | SO2GBIII10 | N | N250GB5.4KS |
| AS4733Z-452G32Mncc | China | LX.R890C.001 | PMDT4500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4733Z-452G32Mnkk | China | LX.R5T0C.001 | PMDT4500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4733Z-452G32Mnrr | China | LX.R8A0C.001 | PMDT4500 | SO2GBIII10 | N | N320GB5.4KS |
| AS4733Z-452G50Mnkk | GCTWN | S2.R5T02.001 | PMDT4500 | SO2GBIII10 | N | N500GB5.4KS |
| AS4733Z-452G50Mnkk | WW | S2.R5T02.002 | PMDT4500 | SO2GBIII10 | N | N500GB5.4KS |
| AS4733Z-453G64Mnrr | WW | S2.R8A0C.001 | PMDT4500 | SO1GBIII10 | SO2GBIII10 | N640GB5.4KS |
| AS4733Z-454G32Mnrr | GCTWN | S2.R8A02.001 | PMDT4500 | SO2GBIII10 | SO2GBIII10 | N320GB5.4KS_4K |
| AS4733Z-454G32Mnrr | WW | S2.R8A02.002 | PMDT4500 | SO2GBIII10 | SO2GBIII10 | N320GB5.4KS_4K |



Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

# Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Windows® 7 with backwards compatibility to Windows® XP.

Refer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the Aspire 4333 Compatibility Test Report released by the Acer Mobile System Testing Department.

| Vendor | Type | Description | P/N |
|---|---|---|---|
| **Adapter** | | | |
| Chicony Power | 65W | Adapter Chicony Power 65W 19V 1.7x5.5x11 Yellow CPA09-A065N1, LV5, low profile LED LF | AP.0650A.017 |
| DELTA | 65W | Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65JH DB A, LV5 LED LF | AP.06501.026 |
| DELTA | 65W | Adapter DELTA 65W 19V 1.7x5.5x11 Yellow ADP-65VH BA, LV5, Low profile LED LF | AP.06501.033 |
| HIPRO | 65W | Adapter HIPRO 65W 19V 1.7x5.5x11 Yellow HP-A0652R3B 1LF, LV5 LED LF | AP.0650A.012 |
| LITE-ON | 65W | Adapter LITE-ON 65W 19V 1.7x5.5x11 Yellow PA-1650-22AC LV5 LED LF | AP.06503.024 |
| LITE-ON | 65W | Adapter LITE-ON 65W 19V 1.7x5.5x11 Yellow PA-1650-69AW, LV5, Low profile LED LF | AP.06503.029 |
| **Audio Codec** | | | |
| Realtek | ALC272X | Realtek Audio Codec ALC272X | LZ.21000.045 |
| **Battery** | | | |
| PANASONIC | 6CELL2.2 | Battery PANASONIC AS10D Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON ID:AS10D51 | BT.00605.062 |
| SAMSUNG | 6CELL2.2 | Battery SAMSUNG AS10D Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON ID:AS10D61 | BT.00606.008 |
| SANYO | 6CELL2.2 | Battery SANYO AS10D Li-Ion 3S2P SANYO 6 cell 4400mAh Main COMMON ID:AS10D31 | BT.00603.111 |
| SIMPLO | 6CELL2.2 | Battery SIMPLO AS10D Li-Ion 3S2P PANASONIC 6 cell 4400mAh Main COMMON ID:AS10D71 | BT.00607.125 |
| SIMPLO | 6CELL2.2 | Battery SIMPLO AS10D Li-Ion 3S2P LGC 6 cell 4400mAh Main COMMON ID:AS10D73 | BT.00607.126 |
| SIMPLO | 6CELL2.2 | Battery SIMPLO AS10D Li-Ion 3S2P SAMSUNG 6 cell 4400mAh Main COMMON ID:AS10D | BT.00607.127 |
| SONY | 6CELL2.2 | Battery SONY AS10D Li-Ion 3S2P SONY 6 cell 4400mAh Main COMMON ID:AS10D41 | BT.00604.049 |
| **Bluetooth** | | | |
| Foxconn | BT 2.1 | Foxconn Bluetooth ATH AR3011 | BH.21100.005 |



Downloaded from www.Manualslib.com manuals search engine

| Vendor | Type | Description | P/N |
|---|---|---|---|
| Foxconn | BT 2.1 | Foxconn Bluetooth BRM 2046 BT2.1 (T60H928.33 Ver.3/PCB V015) HSF | BH.21100.006 |
| Foxconn | BT 2.1 | Foxconn Bluetooth BRM 2070 (T77H114.01) | BH.21100.007 |
| Foxconn | BT 3.0 | Foxconn Bluetooth ATH AR3011 (BT3.0) | BH.21100.009 |
| Foxconn | BT 3.0 | Foxconn Bluetooth BRM 2070 (T77H114.01) BT 3.0 | BH.21100.010 |
| **Camera** | | | |
| Chicony | 1.3M | Chicony 1.3M CH9665SN (CNF9157) | AM.21400.067 |
| Liteon | 1.3M | Liteon 1.3M LT9665AL (09P2SF119) | AM.21400.069 |
| Liteon | 1.3M | Liteon 1.3M LT6AASP( 09P2BF127) | AM.21400.070 |
| Suyin | 1.3M | Suyin 1.3M SY9665SN | AM.21400.068 |
| **Card Reader** | | | |
| | 2-in-1 card reader | 2-in-1 card reader | CR.21500.030 |
| **CPU** | | | |
| INTEL | CM900 | CPU Intel Celeron 900 PGA 2.2G 1M 800 35W | KC.N0001.900 |
| INTEL | CMT3500 | CPU Intel Celeron T3500 PGA 2.1G 1M 800 35W | KC.35001.CMT |
| INTEL | PMDT4500 | CPU Intel Pentium Dual-Core T4500 2.3G 1M 800 | KC.45001.DTP |
| **HDD** | | | |
| HGST | N160GB5.4KS | HDD HGST 2.5" 5400rpm 160GB HTS545016B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.16007.026 |
| HGST | N250GB5.4KS | HDD HGST 2.5" 5400rpm 250GB HTS545025B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.25007.016 |
| HGST | N320GB5.4KS | HDD HGST 2.5" 5400rpm 320GB HTS545032B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.32007.008 |
| HGST | N500GB5.4KS | HDD HGST 2.5" 5400rpm 500GB HTS545050B9A300 Panther B SATA LF F/W:C60F Disk imbalance criteria = 0.014g-cm | KH.50007.010 |
| SEAGATE | N160GB5.4KS | HDD SEAGATE 2.5" 5400rpm 160GB ST9160314AS,9HH13C-189, Seagate(new pcb) SATA 8MB LF F/W:0001SDM1 | KH.16001.045 |
| SEAGATE | N250GB5.4KS | HDD SEAGATE 2.5" 5400rpm 250GB ST9250315AS, 9HH132-189, Wyatt with new pcb SATA 8MB LF F/W:0001SDM1 | KH.25001.019 |
| SEAGATE | N320GB5.4KS | HDD SEAGATE 2.5" 5400rpm 320GB ST9320310AS,9RN132-188, Cameron 320G/P SATA 8MB LF F/W:0001SDM1 | KH.32001.019 |
| SEAGATE | N500GB5.4KS | HDD SEAGATE 2.5" 5400rpm 500GB ST9500325AS,9HH134-189, Wyatt with new pcb SATA 8MB LF F/W:0001SDM1 | KH.50001.017 |
| TOSHIBA | N160GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 160GB MK1665GSX, Capricorn BS, 320G/P SATA 8MB LF F/W:GJ002J | KH.16004.008 |



Downloaded from www.Manualslib.com manuals search engine

| Vendor | Type | Description | P/N |
|---|---|---|---|
| TOSHIBA | N250GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 250GB MK2565GSX, Capricorn BS, 320G/P SATA 8MB LF F/W:GJ002J | KH.25004.005 |
| TOSHIBA | N320GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 320GB Capricorn BS ,MK3265GSX SATA 8MB LF F/W:GJ002J | KH.32004.004 |
| TOSHIBA | N500GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 500GB MK5065GSX,Capricorn BS, 320G/P SATA 8MB LF F/W:GJ002J | KH.50004.002 |
| TOSHIBA | N640GB5.4KS | HDD TOSHIBA 2.5" 5400rpm 640GB MK6465GSX,Capricorn BS,320G/P SATA 8MB LF F/W:GJ002J | KH.64004.001 |
| WD | N160GB5.4KS | HDD WD 2.5" 5400rpm 160GB WD1600BEVT-22A23T0 , WD, ML320S SATA 8MB LF F/W:01.01A01 | KH.16008.027 |
| WD | N250GB5.4KS | HDD WD 2.5" 5400rpm 250GB WD2500BEVT-22A23T0, WD, ML320S SATA 8MB LF F/W:01.01A01. | KH.25008.025 |
| WD | N320GB5.4KS _4K | HDD WD 2.5" 5400rpm 320GB WD3200BPVT-22ZEST0, ML320S, 4K drive SATA 8MB LF F/W: 01.01A01 | KH.32008.022 |
| WD | N500GB5.4KS | HDD WD 2.5" 5400rpm 500GB WD5000BEVT-22A0RT0, ML320M,WD SATA 8MB LF F/W:01.01A01 | KH.50008.017 |
| WD | N640GB5.4KS | HDD WD 2.5" 5400rpm 640GB WD6400BEVT-22A0RT0, ML320 SATA 8MB LF F/W:01.01A01 | KH.64008.004 |
| WD | N640GB5.4KS | HDD WD 2.5" 5400rpm 640GB WD6400BPVT-22HXZT1, ML375M SATA 8MB LF F/W: 01.01A01 | KH.64008.005 |
| WD | N750GB5.4KS | HDD WD 2.5" 5400rpm 750GB WD7500BPVT-22HXZT1, ML375M, 4K drive SATA 8MB LF F/W:01.01A01 | KH.75008.009 |
| **Keyboard** | | | |
| ACER | AC4T_A10B | Keyboard ACER AC4T_A10B AC4T Internal 14 Standard Black Y2010 Acer Legend Texture | KB.I140A.202 |
| **LAN** | | | |
| Broadcom | BCM57780 | Broadcom BCM57780 | NI.22400.047 |
| **LCD** | | | |
| AUO | NLED14WXG AG | LED LCD AUO 14" WXGA Glare B140XW01 V8 0A LF 220nit 8ms 500:1 (power saving) | LK.14005.010 |
| CMI | NLED14WXG AG | LED LCD CMI 14" WXGA Glare BT140GW01 V6 LF 220nit 8ms 600:1 | LK.1400D.008 |
| LPL | NLED14WXG AG | LED LCD LPL 14" WXGA Glare LP140WH1-TLA2 LF 220nit 8ms 500:1 | LK.14008.004 |
| SAMSUNG | NLED14WXG AG | LED LCD SAMSUNG 14" WXGA Glare LTN140AT01-G03 LF 220nit 8ms 500:1 | LK.14006.011 |
| SAMSUNG | NLED14WXG AG | LED LCD SAMSUNG 14" WXGA Glare LTN140AT01-G04 LF 220nit 8ms 500:1 | LK.14006.015 |



Downloaded from www.Manualslib.com manuals search engine

| Vendor | Type | Description | P/N |
|---|---|---|---|
| **MEM** | | | |
| NONE | SO1GBIII10 | Memory NONE REG-ECC DDRIII 1066 1GB phantom p/n LF | KN.1GB00.003 |
| NONE | SO2GBIII10 | Memory NONE SO-DIMM DDRIII 1066 2GB dummy 1066 LF | KN.2GB00.001 |
| **NB Chipset** | | | |
| INTEL | GL40(A1) | NB Chipset Intel CS GL40NB A1 | KI.G4501.009 |
| **ODD** | | | |
| HLDS | NSM8XS | ODD HLDS Super-Multi DRIVE 12.7mm Tray DL 8X GT32N (R5-2) LF W/O bezel SATA with Renesas solution + PCC LD (HF + Windows 7) | KU.0080D.055 |
| PANASONIC | NSM8XS | ODD PANASONIC Super-Multi DRIVE 12.7mm Tray DL 8X UJ8A0 LF W/O bezel SATA (HF + Windows 7) Foxconn Yentai Facotry | KU.00807.075 |
| PLDS | NSM8XS | ODD PLDS Super-Multi DRIVE 12.7mm Tray DL 8X DS-8A5SH LF+HF W/O bezel SATA With TI + Rohm Solution (HF + Windows 7) | KU.0080F.014 |
| SONY | NSM8XS | ODD SONY Super-Multi DRIVE 12.7mm Tray DL 8X AD-7585H LF W/O bezel SATA (HF + Windows 7) | KU.0080E.027 |
| TOSHIBA | NSM8XS | ODD TOSHIBA Super-Multi DRIVE 12.7mm Tray DL 8X TS-L633F LF W/O bezel SATA (HF + Windows 7) | KU.00801.040 |
| **SB Chipset** | | | |
| INTEL | ICH9M | SB Chipset Intel CS ICH9M | KI.80101.030 |
| **Software** | | | |
| | McAfee | Antivirus application McAfee | SR.23900.001 |
| **VGA Chip** | | | |
| None | UMA | UMA (Intel) | KI.23200.038 |
| **WiFi Antenna** | | | |
| WNC | PIFA | PIFA | LZ.23500.006 |
| **Wireless LAN** | | | |
| Foxconn | 3rd WiFi 2x2 BGN | Foxconn Wireless LAN Broadcomm 43225 2x2 BGN (HM) T77H103.00 | NI.23600.066 |
| Foxconn | 3rd WiFi 2x2 BGN | Foxconn Wireless LAN Atheros HB97 2x2 BGN (HM) | NI.23600.072 |
| Liteon | 3rd WiFi 2x2 BGN | Liteon Wireless LAN Atheris HB97 2x2 BGN (HM) WN6603AH | NI.23600.073 |



Downloaded from www.Manualslib.com manuals search engine

# Online Support Information

This section describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices and Regional Business Units may access our website. However some information sources will require a user i.d. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

- Service guides for all models
- Bios updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

Also contained on this website are:

- Returned material authorization procedures
- An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.



Downloaded from www.Manualslib.com manuals search engine

Downloaded from www.Manualslib.com manuals search engine

# Index


## B

Battery Pack 40, 122
BIOS
  ROM type 17
  vendor 17
BIOS Utility 21–29
  Advanced 24
  Boot 27
  Exit 28
  Navigating 21
  Power 27
  Save and Exit 28
  Security 24
  System Security 28
Board Layout
  Top View 137

## C

Camera Module 80, 89
Common Problems 124

## D

DIMM Module 45, 118
Display 4

## E

EasyTouch Failure 133
External Module Disassembly
  Flowchart 39, 113

## F

Features 1
FLASH Utility 29
Flash Utility 29
FRU (Field Replaceable Unit) List 141

## H

Hard Disk Drive Module 43, 118
HDTV Switch Failure 133
Hot Keys 10

## I

Intermittent Problems 134
Internal Microphone Failure 128
Internal Speaker Failure 127

## J

Jumper and Connector Locations 137

## K

Keyboard Failure 127

## L

LCD Bezel 78, 89
LCD Failure 127
LCD Module Disassembly
  Flowchart 77, 85
LCD Panel 81, 87
lower cover 42, 121

## M

Main Unit Disassembly
  Flowchart 52, 92
Mainboard 68, 97
media access
  on indicator 6
Memory Check 124
Model Definition 154

## N

No Display Issue 125

## O

ODD Failure 130
Online Support Information 161
optical drive module 48, 114

## P

Panel 5
  Bottom 7
  left 5
Power On Failure 124




Downloaded from www.Manualslib.com manuals search engine

## R

RTC Battery 70, 97

## S

SD Card 41, 122
System
  Block Diagram 4

## T

Test Compatible Components 155
Thermal Module 72, 95
Thermal Unit Failure 133
Touchpad Failure 127
Troubleshooting
  Built-in KB Failure 127
  EasyTouch Buttons 133
  HDTV Switch 133
  Internal Microphone 128
  Internal Speakers 127
  LCD Failure 127
  No Display 125
  ODD 130
  Other Failures 133
  Power On 124
  Thermal Unit 133
  Touchpad 127
  WLAN 133

## U

Undetermined Problems 134
utility
  BIOS 21–29

## W

Wireless Function Failure 133
WLAN Board 46



Downloaded from www.Manualslib.com manuals search engine